

# CHAPTER 8

## Internal Control and Cash

### ASSIGNMENT CLASSIFICATION TABLE

| <u>Study Objectives</u>   | <u>Questions</u>    | <u>Brief Exercises</u> | <u>Exercises</u>  | <u>A Problems</u> | <u>B Problems</u> |
|---|---------------------|------------------------|-------------------|-------------------|-------------------|
| 1. Define internal control.   | 1                   | 1, 2                   |                   |                   |                   |
| 2. Identify the principles of internal control.                                   | 2, 3, 4, 5, 6, 7, 8 | 3                      | 1, 2, 3, 5, 6     | 1A, 6A            | 1B, 6B            |
| 3. Explain the applications of internal control principles to cash receipts.      | 3, 10, 11, 12       | 4                      | 2, 5, 6           | 6A                | 1B, 6B            |
| 4. Explain the applications of internal control principles to cash disbursements. | 13, 14, 15, 16, 17  | 5                      | 3, 4, 5, 6        | 1A, 6A            | 6B                |
| 5. Describe the operation of a petty cash fund.                                   | 18                  | 6                      | 7, 8              | 2A                | 2B                |
| 6. Indicate the control features of a bank account.                               | 19                  | 7                      |                   |                   |                   |
| 7. Prepare a bank reconciliation.   | 20, 21, 22          | 8, 9, 10, 11           | 9, 10, 11, 12, 13 | 3A, 4A, 5A        | 3B, 4B, 5B, 6B    |
| 8. Explain the reporting of cash.   | 9, 23               | 12                     | 14                |                   |                   |

## ASSIGNMENT CHARACTERISTICS TABLE

| <b>Problem Number</b> | <b>Description</b>  | <b>Difficulty Level</b> | <b>Time Allotted (min.)</b> |
|-----------------------|---|-------------------------|-----------------------------|
| 1A                    | Identify internal control principles over cash disbursements.                           | Simple                  | 20–30                       |
| 2A                    | Journalize and post petty cash fund transactions.                                       | Simple                  | 20–30                       |
| 3A                    | Prepare a bank reconciliation and adjusting entries.                                    | Simple                  | 20–30                       |
| 4A                    | Prepare a bank reconciliation and adjusting entries from detailed data.                 | Moderate                | 40–50                       |
| 5A                    | Prepare a bank reconciliation and adjusting entries.                                    | Moderate                | 30–40                       |
| 6A                    | Identify internal control weaknesses in cash receipts and cash disbursements.           | Complex                 | 35–45                       |
| 1B                    | Identify internal control weaknesses over cash receipts.                                | Simple                  | 20–30                       |
| 2B                    | Journalize and post petty cash fund transactions.                                       | Simple                  | 20–30                       |
| 3B                    | Prepare a bank reconciliation and adjusting entries.                                    | Simple                  | 20–30                       |
| 4B                    | Prepare a bank reconciliation and adjusting entries from detailed data.                 | Moderate                | 40–50                       |
| 5B                    | Prepare a bank reconciliation and adjusting entries.                                    | Moderate                | 30–40                       |
| 6B                    | Prepare comprehensive bank reconciliation with theft and internal control deficiencies. | Complex                 | 40–50                       |

# BLOOM'S TAXONOMY TABLE

Correlation Chart between Bloom's Taxonomy, Study Objectives and End-of-Chapter Exercises and Problems

| Study Objective   | Knowledge                       | Comprehension                    | Application                   | Analysis   | Synthesis | Evaluation   |
|---|---------------------------------|----------------------------------|-------------------------------|--|-----------|--|
| 1. Define internal control.   | Q8-1<br>BE8-1<br>BE8-2          |                                  |                               |  |           |  |
| 2. Identify the principles of internal control.                                   | Q8-2<br>Q8-3<br>Q8-4<br>Q8-5    | E8-6<br>Q8-7<br>Q8-8<br>BE8-3    | E8-1<br>E8-5<br>E8-6<br>P8-1A |  |           | E8-2<br>E8-3<br>P8-1B<br>P8-6A<br>P8-6B                            |
| 3. Explain the applications of internal control principles to cash receipts.      | Q8-3<br>Q8-10<br>Q8-11<br>Q8-12 | BE8-4<br>E8-5<br>E8-6            |                               |  |           | E8-2<br>P8-1B<br>P8-6A<br>P8-6B                                    |
| 4. Explain the applications of internal control principles to cash disbursements. | Q8-15<br>Q8-16<br>Q8-17         | E8-5<br>E8-6<br>P8-1A            |                               |  |           | E8-3<br>E8-4<br>P8-6A<br>P8-6B                                     |
| 5. Describe the operation of a petty cash fund.                                   |                                 | Q8-18                            | BE8-6<br>E8-7<br>E8-8         |  |           |  |
| 6. Indicate the control features of a bank account.                               |                                 | Q8-19<br>BE8-7                   |                               |  |           |  |
| 7. Prepare a bank reconciliation.   | Q8-21                           | Q8-20<br>Q8-22<br>BE8-8<br>BE8-9 | BE8-10<br>BE8-11<br>E8-10     | E8-9<br>P8-3A<br>P8-4A<br>P8-5A<br>P8-3B                           |           | P8-6B  |
| 8. Explain the reporting of cash.   |                                 | Q8-23<br>BE8-12                  | Q8-9<br>E8-14                 |  |           |  |
| Broadening Your Perspective   |                                 | Financial Reporting              |                               | Decision Making<br>Across the Organization<br>Comparative Analysis |           | All About You<br>Ethics Case<br>Communication<br>Exploring the Web |

# ANSWERS TO QUESTIONS

1. Disagree. Internal control is also concerned with the safeguarding of company assets from employee theft, robbery, and unauthorized use.
2. The principles of internal control are: (a) establishment of responsibility, (b) segregation of duties, (c) documentation procedures, (d) physical, mechanical, and electronic controls, (e) independent internal verification, and (f) other controls.
3. This is a violation of the internal control principle of establishing responsibility. In this case, each sales clerk should have a separate cash register or cash register drawer.
4. The two applications of segregation of duties are:
  - (1) Different individuals should be responsible for related activities.
  - (2) Responsibility for the record keeping for an asset should be separate from the physical custody of that asset.
5. Documentation procedures contribute to good internal control by providing evidence that transactions and events have occurred and, when signatures (or initials) are added, the documents establish responsibility for the transactions. The prompt transmittal of documents to accounting contributes to recording transactions in the proper period, and the prenumbering of documents helps to ensure that a transaction is not recorded more than once or not at all.
6. Physical controls include safes, vaults, and locked warehouses. These controls contribute to the safeguarding of company assets. Mechanical and electronic controls include cash registers and time clocks that contribute to the accuracy and reliability of the accounting records, and electronic burglary systems and sensors that help to safeguard assets.
7.
  - (a) Independent internal verification involves the review of data prepared by employees.
  - (b) Maximum benefit is obtained from independent internal verification when:
    - (1) The verification is made periodically or on a surprise basis.
    - (2) The verification is done by an employee who is independent of the personnel responsible for the information.
    - (3) Discrepancies and exceptions are reported to a management level that can take appropriate corrective action.
8.
  - (a) The concept of reasonable assurance rests on the premise that the costs of establishing control procedures should not exceed their expected benefit.
  - (b) The human element is an important factor in a system of internal control. A good system can become ineffective through employee fatigue, carelessness, or indifference. Moreover, internal control may become ineffective as a result of collusion.
9. Cash should be reported at \$20,850 ( $\$8,000 + \$850 + \$12,000$ ).
10. Daily cash counts pertain primarily to the principles of segregation of duties and independent internal verification. Daily cash counts also involve the establishment of responsibility for performing the counts.

## Questions Chapter 8 (Continued)

11. Cash registers are readily visible to the customer. Thus, they prevent the sales clerk from ringing up a lower amount and pocketing the difference. In addition, the customer receives an itemized receipt, and the cash register tape is locked into the register for further verification.
12. Two mail clerks contribute to a more accurate listing of mail receipts and to the endorsement of all checks "For Deposit Only." In addition, two clerks reduce the likelihood of mail receipts being diverted to personal use.
13. Payment by check contributes to effective internal control over cash disbursements. However, effective control is also possible when small payments are made from petty cash.
14. The procedure and related principle are:
- | <u>Procedure</u>  | <u>Principle</u>                                 |
|---|--|
| (1) Treasurer signs checks.                               | * Establishment of responsibility.               |
| (2) Checks imprinted by a machine in indelible ink.       | * Physical, mechanical, and electronic controls. |
| (3) Comparing check with approved invoice before signing. | * Independent internal verification.             |
15. Physical, mechanical, and electronic controls apply to cash disbursements when: (a) blank checks are stored in a safe, and access to the safe is restricted to authorized personnel, and (b) a checkwriting machine and indelible ink are used to imprint amounts on checks. Other controls apply when the approved invoice is stamped PAID after payment.
16. (a) A voucher system is a network of approvals by authorized individuals acting independently to ensure that all disbursements by check are proper.  
(b) The internal control principles applicable to a voucher system are: (1) establishment of responsibility, (2) segregation of duties, and (3) independent internal verification.
17. Electronic funds transfer is a cash disbursement system that uses wire, telephone, or computers to transfer cash from one location to another.
18. The activities in a petty cash system and the related principles are:
- |                                    |   |
|------------------------------------|---|
| (a) (1) Establishing the fund.     | * Establishment of responsibility for custody of fund.  |
| (2) Making payments from the fund. | * Documentation procedures because the custodian must use a prenumbered petty cash receipt.                             |
| (3) Replenishing the fund.         | * Independent internal verification because the request for replenishment must be approved before the check is written. |
- (b) Journal entries are required for a petty cash fund when it is established and replenished. Entries are also required when the size of the fund is increased or decreased.
19. A bank contributes significantly to internal control over cash because it: (1) safeguards cash on deposit, (2) minimizes the amount of currency that must be kept on hand, and (3) provides a double record of all bank transactions.

**Questions Chapter 8 (Continued)**

- 20.** The lack of agreement between the balances may be due to either:
- (1) Time lags—a check written in July does not clear the bank until August.
  - (2) Errors—a check for \$110 is recorded by the depositor at \$101.
- 21.** The four steps are: (1) determine deposits in transit, (2) determine outstanding checks, (3) discover any errors made, and (4) trace bank memoranda.
- 22.**
- (a) An NSF check occurs when the checkwriter's bank balance is less than the amount of the check.
  - (b) In a bank reconciliation, a customer's NSF check is deducted from the balance per books.
  - (c) An NSF check results in an adjusting entry in the company's books, as a debit to Accounts Receivable and a credit to Cash.
- 23.**
- (a) Cash equivalents are highly liquid investments that can be converted into a specific amount of cash with maturities of three months or less when purchased. Cash equivalents may be reported with cash in the current assets section of the balance sheet.
  - (b) Cash restricted for a special purpose should be reported as a current or noncurrent asset depending on when the cash is expected to be used.

# SOLUTIONS TO BRIEF EXERCISES

## BRIEF EXERCISE 8-1

1. True.
2. True.
3. False. The Sarbanes-Oxley Act of 2002 requires U.S. corporations to maintain an adequate system of internal control.

## BRIEF EXERCISE 8-2

The purposes of internal control are to:

1. Safeguard a company's assets from employee theft, robbery, and unauthorized use. An application for Ready Parking is the use of a cash register to safeguard assets.
2. Enhance the accuracy and reliability of a company's accounting records by reducing the risk of errors (unintentional mistakes) and irregularities (intentional mistakes and misrepresentations) in the accounting process. An application for Ready Parking is preparation of a bank reconciliation.

Both purposes are important to the success of any business endeavor.

## BRIEF EXERCISE 8-3

- (a) Segregation of duties.
- (b) Independent internal verification.
- (c) Documentation procedures.

## BRIEF EXERCISE 8-4

1. Physical, mechanical, and electronic controls.
2. Other controls.
3. Independent internal verification.
4. Segregation of duties.
5. Establishment of responsibility.

### BRIEF EXERCISE 8-5

1. Documentation procedures.
2. Independent internal verification.
3. Physical, mechanical, and electronic controls.
4. Establishment of responsibility.
5. Segregation of duties.

### BRIEF EXERCISE 8-6

|         |                           |    |    |
|---------|---------------------------|----|----|
| Mar. 20 | Postage Expense .....     | 52 |    |
|         | Freight-out .....         | 26 |    |
|         | Travel Expense .....      | 10 |    |
|         | Cash Over and Short ..... | 5  |    |
|         | Cash .....                |    | 93 |

### BRIEF EXERCISE 8-7

- (a) A check provides documentary evidence of the payment of a specified sum of money to a designated payee.
- (b) A bank statement provides a double record of a depositor's bank transactions. It also is used in making periodic independent bank reconciliations.

### BRIEF EXERCISE 8-8

- (1) Outstanding checks—deducted from cash balance per bank.
- (2) Bank service charge—deducted from cash balance per books.
- (3) Collection of note by bank—added to cash balance per books.
- (4) Deposits in transit—added to cash balance per bank.



**BRIEF EXERCISE 8-9**

- (a) The reconciling items per the books, items (2) and (3) above, will require adjustment on the books of the depositor.
- (b) The other reconciling items, deposits in transit and outstanding checks, do not require adjustment by the bank. When these items reach the bank, the bank balance will automatically adjust itself.

**BRIEF EXERCISE 8-10**

|                                      |                |
|--------------------------------------|----------------|
| Cash balance per bank.....           | \$7,420        |
| Add: Deposits in transit.....        | <u>1,120</u>   |
|                                      | 8,540          |
| Less: Outstanding checks .....       | <u>762</u>     |
| Adjusted cash balance per bank ..... | <u>\$7,778</u> |

**BRIEF EXERCISE 8-11**

|   |                |
|---|----------------|
| Cash balance per books .....                  | \$8,500        |
| Add: Interest earned .....                    | <u>40</u>      |
|   | 8,540          |
| Less: Charge for printing company checks..... | <u>35</u>      |
| Adjusted cash balance per books .....         | <u>\$8,505</u> |

**BRIEF EXERCISE 8-12**

Quirk Company should report Cash in Bank and Payroll Bank account as current assets. Plant Expansion Fund Cash should be reported as a noncurrent asset, assuming the fund is not expected to be used during the next year.

# SOLUTIONS TO EXERCISES

## EXERCISE 8-1

1. **Establishment of responsibility.** The counter clerk is responsible for handling cash. Other employees are responsible for making the pizzas.
2. **Segregation of duties.** Employees who make the pizzas do not handle cash.
3. **Documentation procedures.** The counter clerk uses your order invoice (ticket) in registering the sale on the cash register. The cash register produces a tape of all sales.
4. **Physical, mechanical, and electronic controls.** A cash register is used to record the sale.
5. **Independent internal verification.** The counter clerk, in handling the pizza, compares the size of the pizza with the size indicated on the order.
6. **Other controls.** No visible application possible.

## EXERCISE 8-2

| <u>Procedure</u> | <u>(a)</u>  |  | <u>(b)</u>   |
|------------------|---|--|--|
|                  | <u>Weakness</u>   | <u>Principle</u>                               | <u>Recommended Change</u>  |
| 1.               | Cash is not adequately protected from theft.                          | Physical, mechanical, and electronic controls. | Cash should be stored in a safe until it is deposited in bank.           |
| 2.               | Inability to establish responsibility for cash with a specific clerk. | Establishment of responsibility.               | There should be separate cash drawers and register codes for each clerk. |

## EXERCISE 8-2 (Continued)

| <b>Procedure</b> | <b>(a)</b>                             |                                    | <b>(b)</b>   |
|------------------|--|------------------------------------|--|
|                  | <b>Weakness</b>                        | <b>Principle</b>                   | <b>Recommended Change</b>                          |
| 3.               | The accountant should not handle cash. | Segregation of duties.             | The cashier's department should make the deposits. |
| 4.               | Cash is not independently counted.     | Independent internal verification. | A cashier office supervisor should count cash.     |
| 5.               | Cashiers are not bonded.               | Other controls.                    | All cashiers should be bonded.                     |

## EXERCISE 8-3

| <b>Procedure</b> | <b>(a)</b>  |  | <b>(b)</b>   |
|------------------|---|--|--|
|                  | <b>Weakness</b>   | <b>Principle</b>                               | <b>Recommended Change</b>  |
| 1.               | The bank reconciliation is not independently prepared.            | Independent internal verification.             | Someone with no other cash responsibilities should prepare the bank reconciliation.                |
| 2.               | The approval and payment of bills is done by the same individual. | Segregation of duties.                         | The store manager should approve bills for payment and the treasurer should sign and issue checks. |
| 3.               | Checks are not stored in a secure area.                           | Physical, mechanical, and electronic controls. | Checks should be stored in a safe or locked file drawer.   |

### EXERCISE 8-3 (Continued)

| <u>Procedure</u> | <u>(a)</u>   |                           | <u>(b)</u>   |
|------------------|--|---------------------------|--|
|                  | <u>Weakness</u>  | <u>Principle</u>          | <u>Recommended Change</u>                                    |
| 4.               | Filing does not prevent a bill from being paid more than once. | Other controls.           | Bills should be stamped PAID after payment.                  |
| 5.               | Checks are not prenumbered.                                    | Documentation procedures. | Checks should be prenumbered and subsequently accounted for. |

### EXERCISE 8-4

#### (a) Weaknesses

1. Checks are not prenumbered.
2. The purchasing agent signs checks.
3. Unissued checks are stored in unlocked file cabinet.
4. Purchasing agent approves and pays for goods purchased.
5. After payment, the invoice is filed.
6. The purchasing agent records payments in cash disbursements journal.

#### (b) Suggested Improvement

1. Use prenumbered checks.
2. Only the treasurer's department personnel should sign checks.
3. Unissued checks should be stored in a locked file cabinet with access restricted to authorized personnel.
4. Purchasing should approve bills for payment by the treasurer.
5. The invoice should be stamped PAID.
6. Only accounting department personnel should record cash disbursements.

## EXERCISE 8-4 (Continued)

### (a) Weaknesses

7. The treasurer records the checks in cash disbursements journal.
8. The treasurer reconciles the bank statement.

### (b) Suggested Improvement

- Same as answer to No. 6 above.
- An internal auditor should reconcile the bank statement.

(b) To: Treasurer, Hutchingson Company

From: Accounting Student

I have reviewed your cash disbursements system and suggest that you make the following improvements:

1. Hutchingson Company should use prenumbered checks. These should be stored in a locked file cabinet or safe with access restricted to authorized personnel.
2. The purchasing department should approve bills for payment. The treasurer's department should prepare and sign the checks. The invoices should be stamped paid so that they cannot be paid twice.
3. Only the accounting department personnel should record cash disbursements.
4. An internal auditor should reconcile the bank statement.

If you have any questions about implementing these suggestions, please contact me.

### EXERCISE 8-5

| <u>Procedure</u> | <u>IC good or weak?</u> | <u>Related internal control principle</u> |
|------------------|-------------------------|---|
| 1.               | Weak                    | Establishment of Responsibility           |
| 2.               | Good                    | Independent Internal Verification         |
| 3.               | Weak                    | Segregation of Duties                     |
| 4.               | Good                    | Segregation of Duties                     |
| 5.               | Weak                    | Documentation Procedures                  |

### EXERCISE 8-6

| <u>Procedure</u> | <u>IC good or weak?</u> | <u>Related internal control principle</u>     |
|------------------|-------------------------|---|
| 1.               | Good                    | Other Controls                                |
| 2.               | Weak                    | Establishment of Responsibility               |
| 3.               | Weak                    | Segregation of Duties                         |
| 4.               | Good                    | Independent Internal Verification             |
| 5.               | Good                    | Physical, Mechanical, and Electronic Controls |

### EXERCISE 8-7

|         |                             |        |        |
|---------|-----------------------------|--------|--------|
| May 1   | Petty Cash.....             | 100.00 |        |
|         | Cash .....                  |        | 100.00 |
| June 1  | Delivery Expense.....       | 31.25  |        |
|         | Postage Expense.....        | 39.00  |        |
|         | Miscellaneous Expense ..... | 25.00  |        |
|         | Cash Over and Short.....    | 2.00   |        |
|         | Cash.....                   |        | 97.25  |
| July 1  | Delivery Expense.....       | 21.00  |        |
|         | Entertainment Expense ..... | 51.00  |        |
|         | Miscellaneous Expense ..... | 24.75  |        |
|         | Cash .....                  |        | 96.75  |
| July 10 | Petty Cash.....             | 50.00  |        |
|         | Cash .....                  |        | 50.00  |

**EXERCISE 8-8**

|        |                             |     |     |
|--------|-----------------------------|-----|-----|
| Mar. 1 | Petty Cash .....            | 100 |     |
|        | Cash .....                  |     | 100 |
| 15     | Stamp Inventory .....       | 39  |     |
|        | Freight-out.....            | 21  |     |
|        | Miscellaneous Expense ..... | 11  |     |
|        | Travel Expense .....        | 24  |     |
|        | Cash Over and Short .....   | 2   |     |
|        | Cash .....                  |     | 97  |
| 20     | Petty Cash .....            | 50  |     |
|        | Cash .....                  |     | 50  |

**EXERCISE 8-9**

|     |                                       |              |                   |
|-----|---------------------------------------|--------------|-------------------|
| (a) | Cash balance per bank statement.....  |              | \$3,560.20        |
|     | Add: Deposits in transit.....         |              | <u>530.00</u>     |
|     |                                       |              | 4,090.20          |
|     | Less: Outstanding checks .....        |              | <u>930.00</u>     |
|     | Adjusted cash balance per bank.....   |              | <u>\$3,160.20</u> |
|     | Cash balance per books .....          |              | \$3,875.20        |
|     | Less: NSF check.....                  | \$690.00     |                   |
|     | Bank service charge .....             | <u>25.00</u> | <u>715.00</u>     |
|     | Adjusted cash balance per books ..... |              | <u>\$3,160.20</u> |
| (b) | Accounts Receivable .....             | 690.00       |                   |
|     | Cash.....                             |              | 690.00            |
|     | Miscellaneous Expense .....           | 25.00        |                   |
|     | Cash.....                             |              | 25.00             |

## EXERCISE 8-10

The outstanding checks are as follows:

| <u>No.</u> | <u>Amount</u>  |
|------------|----------------|
| 255        | \$ 820         |
| 260        | 890            |
| 264        | 560            |
| Total      | <u>\$2,270</u> |

## EXERCISE 8-11

(a) **FAMILY VIDEO COMPANY**  
**Bank Reconciliation**  
**July 31**

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|   |                |
|---|----------------|
| Cash balance per bank statement .....   | \$7,263        |
| Add: Deposits in transit .....  | <u>1,500</u>   |
|   | 8,763          |
| Less: Outstanding checks.....   | <u>591</u>     |
| Adjusted cash balance per bank.....   | <u>\$8,172</u> |
| <br>  |                |
| Cash balance per books.....   | \$7,284        |
| Add: Collection of note receivable<br>(\$900 plus accrued interest \$36,<br>less collection fee \$20) ..... | <u>916</u>     |
|   | 8,200          |
| Less: Bank service charge.....  | <u>28</u>      |
| Adjusted cash balance per books .....   | <u>\$8,172</u> |

|             |                             |     |     |
|-------------|-----------------------------|-----|-----|
| (b) July 31 | Cash .....                  | 916 |     |
|             | Miscellaneous Expense ..... | 20  |     |
|             | Notes Receivable .....      |     | 900 |
|             | Interest Revenue .....      |     | 36  |
| <br>        |                             |     |     |
| 31          | Miscellaneous Expense.....  | 28  |     |
|             | Cash .....                  |     | 28  |



**EXERCISE 8-12**

(a)

**ROBERTSON COMPANY**  
**Bank Reconciliation**  
**September 30**

|   |           |                 |
|---|-----------|-----------------|
| Cash balance per bank statement .....                     |           | \$16,422        |
| Add: Deposits in transit .....                            |           | <u>4,450</u>    |
|   |           | 20,872          |
| Less: Outstanding checks .....                            |           | <u>2,383</u>    |
| Adjusted cash balance per bank .....                      |           | <u>\$18,489</u> |
|   |           |                 |
| Cash balance per books .....                              |           | \$17,404        |
| Add: Collection of note receivable (\$1,500 + \$30) ..... | \$ 1,530  |                 |
| Interest earned .....                                     | <u>45</u> | <u>1,575</u>    |
|   |           | 18,979          |
| Less: NSF check .....                                     | 425       |                 |
| Safety deposit box rent .....                             | <u>65</u> | <u>490</u>      |
| Adjusted cash balance per books .....                     |           | <u>\$18,489</u> |

|     |          |  |       |           |
|-----|----------|--|-------|-----------|
| (b) | Sept. 30 | Cash .....                             | 1,530 |           |
|     |          | Notes Receivable .....                 |       | 1,500     |
|     |          | Interest Revenue .....                 |       | <u>30</u> |
|     | 30       | Cash .....                             | 45    |           |
|     |          | Interest Revenue .....                 |       | 45        |
|     | 30       | Miscellaneous Expense .....            | 65    |           |
|     |          | Cash .....                             |       | 65        |
|     | 30       | Accounts Receivable—J. E. Hoover ..... | 425   |           |
|     |          | Cash .....                             |       | 425       |

**EXERCISE 8-13**

(a) Deposits in transit:

|                                       |              |               |
|---------------------------------------|--------------|---------------|
| Deposits per books in July .....      |              | \$15,750      |
| Less: Deposits per bank in July ..... | \$15,600     |               |
| Deposits in transit, June 30 .....    | <u>(720)</u> | <u>14,880</u> |
| July receipts deposited in July ..... |              | <u>14,880</u> |
| Deposits in transit, July 31 .....    |              | <u>\$ 870</u> |

**EXERCISE 8-13 (Continued)**

|  |              |                 |
|--|--------------|-----------------|
| <b>(b) Outstanding checks:</b>                 |              |                 |
| Checks per books in July .....                 |              | \$17,200        |
| Less: Checks clearing bank in July .....       | \$16,400     |                 |
| Outstanding checks, June 30 .....              | <u>(680)</u> |                 |
| July checks cleared in July .....              |              | <u>15,720</u>   |
| Outstanding checks, July 31 .....              |              | <u>\$ 1,480</u> |
| <br>   |              |                 |
| <b>(c) Deposits in transit:</b>                |              |                 |
| Deposits per bank statement in September ..... |              | \$26,700        |
| Add: Deposits in transit, September 30 .....   |              | <u>2,100</u>    |
| Total deposits to be accounted for .....       |              | 28,800          |
| Less: Deposits per books .....                 |              | <u>25,400</u>   |
| Deposits in transit, August 31 .....           |              | <u>\$ 3,400</u> |
| <br>   |              |                 |
| <b>(d) Outstanding checks:</b>                 |              |                 |
| Checks clearing bank in September .....        |              | \$25,000        |
| Add: Outstanding checks, September 30 .....    |              | <u>2,100</u>    |
| Total checks to be accounted for .....         |              | 27,100          |
| Less: Cash disbursements per books .....       |              | <u>23,700</u>   |
| Outstanding checks, August 31 .....            |              | <u>\$ 3,400</u> |

**EXERCISE 8-14**

- (a) Cash and cash equivalents should be reported at \$93,500.**
- |                                 |                 |
|---------------------------------|-----------------|
| Cash in bank .....              | \$47,000        |
| Cash on hand .....              | 12,000          |
| Petty cash .....                | 500             |
| Highly liquid investments ..... | <u>34,000</u>   |
|                                 | <u>\$93,500</u> |
- (b) “Cash in plant expansion fund” should be reported as part of long-term investments (a noncurrent asset). “Receivables from customers” should be reported as accounts receivable in the current assets. “Stock investments” should also be reported in the current assets.**
- (c) Lipkus should disclose in the financial statements the details about the compensating balances. These are generally minimum cash balances the bank requires the borrower to maintain. They are a restriction on the use of cash that may affect the company’s liquidity.**

# SOLUTIONS TO PROBLEMS

## PROBLEM 8-1A

### Principles

### Application to Cash Disbursements

**Establishment of responsibility.**

**Only the treasurer and assistant treasurer are authorized to sign checks.**

**Segregation of duties.**

**Invoices must be approved by both the purchasing agent and the receiving department supervisor. Payment can only be made by the treasurer or assistant treasurer, and the check signers do not record the cash disbursement transactions.**

**Documentation procedures.**

**Checks are prenumbered.**

**Physical, mechanical, and electronic controls.**

**Blank checks are kept in a safe in the treasurer's office. Only the treasurer and assistant treasurer have access to the safe. A checkwriting machine is used in writing checks.**

**Independent internal verification.**

**The check signer compares the check with the approved invoice prior to issue. Bank and book balances are reconciled monthly by the assistant chief accountant.**

**Other controls.**

**Following payment, invoices are stamped PAID.**

**PROBLEM 8-2A**

|            |                |          |                                       |               |               |
|------------|----------------|----------|---------------------------------------|---------------|---------------|
| <b>(a)</b> | <b>July</b>    | <b>1</b> | Petty Cash .....                      | <b>200.00</b> |               |
|            |                |          | Cash .....                            |               | <b>200.00</b> |
|            | <b>15</b>      |          | Freight-out.....                      | <b>94.00</b>  |               |
|            |                |          | Postage Expense .....                 | <b>42.40</b>  |               |
|            |                |          | Entertainment Expense .....           | <b>46.60</b>  |               |
|            |                |          | Miscellaneous Expense.....            | <b>11.20</b>  |               |
|            |                |          | Cash Over and Short .....             | <b>1.80</b>   |               |
|            |                |          | Cash .....                            |               | <b>196.00</b> |
|            | <b>31</b>      |          | Freight-out.....                      | <b>82.10</b>  |               |
|            |                |          | Charitable Contributions Expense..... | <b>45.00</b>  |               |
|            |                |          | Postage Expense .....                 | <b>25.50</b>  |               |
|            |                |          | Miscellaneous Expense.....            | <b>39.40</b>  |               |
|            |                |          | Cash .....                            |               | <b>192.00</b> |
|            | <b>Aug. 15</b> |          | Freight-out.....                      | <b>75.60</b>  |               |
|            |                |          | Entertainment Expense .....           | <b>43.00</b>  |               |
|            |                |          | Postage Expense .....                 | <b>33.00</b>  |               |
|            |                |          | Miscellaneous Expense.....            | <b>37.00</b>  |               |
|            |                |          | Cash Over and Short .....             |               | <b>1.60</b>   |
|            |                |          | Cash .....                            |               | <b>187.00</b> |
|            | <b>16</b>      |          | Petty Cash .....                      | <b>100.00</b> |               |
|            |                |          | Cash .....                            |               | <b>100.00</b> |
|            | <b>31</b>      |          | Postage Expense .....                 | <b>140.00</b> |               |
|            |                |          | Travel Expense .....                  | <b>95.60</b>  |               |
|            |                |          | Freight-out.....                      | <b>47.10</b>  |               |
|            |                |          | Cash Over and Short .....             | <b>1.30</b>   |               |
|            |                |          | Cash .....                            |               | <b>284.00</b> |

**(b)**

**Petty Cash**

| Date    | Explanation | Ref. | Debit | Credit | Balance |
|---------|-------------|------|-------|--------|---------|
| July 1  |             | CP   | 200   |        | 200     |
| Aug. 16 |             | CP   | 100   |        | 300     |

**PROBLEM 8-2A (Continued)**

**(c) The internal control features of a petty cash fund include:**

- (1) A custodian is responsible for the fund.**
- (2) A prenumbered petty cash receipt signed by the custodian and the individual receiving payment is required for each payment from the fund.**
- (3) The treasurer's office examines all payments and stamps supporting documents to indicate they were paid when the fund is replenished.**
- (4) Surprise counts can be made at any time to determine whether the fund is intact.**

|                     |
|---------------------|
| <b>PROBLEM 8-3A</b> |
|---------------------|

(a) **JAMES LOGAN COMPANY**  
**Bank Reconciliation**  
**May 31, 2008**

|   |            |            |
|---|------------|------------|
| Cash balance per bank statement .....   |            | \$6,404.60 |
| Add: Deposit in transit .....           | \$1,916.15 |            |
| Bank error—Bridgetown check .....       | 800.00     | 2,716.15   |
|   |            | 9,120.75   |
| Less: Outstanding checks.....           |            | 576.25     |
| Adjusted cash balance per bank.....     |            | \$8,544.50 |
|   |            |            |
| Cash balance per books.....             |            | \$6,781.50 |
| Add: Collection of note receivable      |            |            |
| (\$2,500 note plus \$80 interest        |            |            |
| less \$20 fee) .....                    |            | 2,560.00   |
|   |            | 9,341.50   |
| Less: NSF check.....                    | \$ 680.00  |            |
| Error in May 12 deposit                 |            |            |
| (\$886.15 – \$836.15) .....             | 50.00      |            |
| Error in recording check No. 1181 ..... | 27.00*     |            |
| Check printing charge .....             | 40.00      | 797.00     |
| Adjusted cash balance per books .....   |            | \$8,544.50 |

\*\$685 – \$658

|     |        |                                     |       |       |
|-----|--------|-------------------------------------|-------|-------|
| (b) | May 31 | Cash .....                          | 2,560 |       |
|     |        | Miscellaneous Expense.....          | 20    |       |
|     |        | Notes Receivable .....              |       | 2,500 |
|     |        | Interest Revenue .....              |       | 80    |
|     | 31     | Accounts Receivable—S. Grifton..... | 680   |       |
|     |        | Cash .....                          |       | 680   |
|     | 31     | Sales.....                          | 50    |       |
|     |        | Cash .....                          |       | 50    |
|     | 31     | Accounts Payable—B. Trest .....     | 27    |       |
|     |        | Cash .....                          |       | 27    |
|     | 31     | Miscellaneous Expense.....          | 40    |       |
|     |        | Cash .....                          |       | 40    |

|                     |
|---------------------|
| <b>PROBLEM 8-4A</b> |
|---------------------|

(a)

**BACKHAUS COMPANY**  
**Bank Reconciliation**  
**December 31, 2008**

|   |                 |                    |
|---|-----------------|--------------------|
| Cash balance per bank statement.....    |                 | \$20,154.30        |
| Add: Deposits in transit.....           |                 | <u>1,690.40</u>    |
|   |                 | 21,844.70          |
| Less: Outstanding checks                |                 |                    |
| No. 3470 .....                          | \$ 720.10       |                    |
| No. 3474 .....                          | 1,050.00        |                    |
| No. 3478 .....                          | 621.30          |                    |
| No. 3481 .....                          | 807.40          |                    |
| No. 3484 .....                          | 798.00          |                    |
| No. 3486 .....                          | <u>1,889.50</u> | <u>5,886.30</u>    |
| Adjusted cash balance per bank.....     |                 | <u>\$15,958.40</u> |
| <br>                                    |                 |                    |
| Cash balance per books .....            |                 | \$12,485.20        |
| Add: Note collected by bank             |                 |                    |
| (\$4,000 note plus \$160 interest       |                 |                    |
| less \$15 fee).....                     |                 | <u>4,145.00</u>    |
|   |                 | 16,630.20          |
| Less: NSF check.....                    | \$ 572.80       |                    |
| Error in recording check No. 3485 ..... | 90.00*          |                    |
| Error in 12-21 deposit                  |                 |                    |
| (\$2,954 – \$2,945).....                | <u>9.00</u>     | <u>671.80</u>      |
| Adjusted cash balance per books .....   |                 | <u>\$15,958.40</u> |

\*\$540.80 – \$450.80

|     |         |                                     |          |          |
|-----|---------|-------------------------------------|----------|----------|
| (b) | Dec. 31 | Cash .....                          | 4,145.00 |          |
|     |         | Miscellaneous Expense .....         | 15.00    |          |
|     |         | Notes Receivable .....              |          | 4,000.00 |
|     |         | Interest Revenue .....              |          | 160.00   |
|     | 31      | Accounts Receivable—D. Chagnon..... | 572.80   |          |
|     |         | Cash .....                          |          | 572.80   |
|     | 31      | Accounts Payable .....              | 90.00    |          |
|     |         | Cash .....                          |          | 90.00    |
|     | 31      | Accounts Receivable .....           | 9.00     |          |
|     |         | Cash .....                          |          | 9.00     |

|                     |
|---------------------|
| <b>PROBLEM 8-5A</b> |
|---------------------|

(a) **HAVERMAN COMPANY**  
**Bank Reconciliation**  
**July 31, 2008**

|                                       |            |                 |
|---------------------------------------|------------|-----------------|
| Cash balance per bank statement ..... |            | \$24,514        |
| Add: Deposits in transit (1).....     |            | <u>9,400</u>    |
|                                       |            | 33,914          |
| Less: Outstanding checks (2) .....    | \$ 8,460   |                 |
| Bank error (\$255 – \$155) .....      | <u>100</u> | <u>8,560</u>    |
| Adjusted cash balance per bank.....   |            | <u>\$25,354</u> |

|  |           |                 |
|--|-----------|-----------------|
| Cash balance per books.....                |           | \$21,850        |
| Add: Collection of note receivable by bank |           |                 |
| (\$3,400 note plus \$70 interest).....     | \$ 3,470  |                 |
| Book error (\$320 – \$230).....            | <u>90</u> | <u>3,560</u>    |
|  |           | 25,410          |
| Less: Check printing charge .....          |           | <u>56</u>       |
| Adjusted cash balance per books .....      |           | <u>\$25,354</u> |

|                                    |              |                 |
|------------------------------------|--------------|-----------------|
| (1) July receipts per books .....  |              | \$81,400        |
| July deposits per bank .....       | \$79,000     |                 |
| Less: Deposits in transit,         |              |                 |
| June 30 .....                      | <u>7,000</u> | <u>72,000</u>   |
| Deposits in transit, July 31 ..... |              | <u>\$ 9,400</u> |

|                             |              |                 |
|-----------------------------|--------------|-----------------|
| (2) Disbursements per books |              |                 |
| in July.....                |              | \$77,150        |
| Less: Book error .....      |              | <u>90</u>       |
| Total disbursements to      |              |                 |
| be accounted for .....      |              | 77,060          |
| Checks clearing bank        |              |                 |
| in July.....                | \$74,700     |                 |
| Add: Bank error .....       | \$ 100       |                 |
| Less: June 30               |              |                 |
| outstanding checks.....     | <u>6,200</u> | <u>6,100</u>    |
| Outstanding checks,         |              | <u>68,600</u>   |
| July 31.....                |              | <u>\$ 8,460</u> |



**PROBLEM 8-5A (Continued)**

|            |                |                                    |              |              |
|------------|----------------|------------------------------------|--------------|--------------|
| <b>(b)</b> | <b>July 31</b> | <b>Cash.....</b>                   | <b>3,470</b> |              |
|            |                | <b>Notes Receivable.....</b>       |              | <b>3,400</b> |
|            |                | <b>Interest Revenue.....</b>       |              | <b>70</b>    |
|            | <b>31</b>      | <b>Miscellaneous Expense .....</b> | <b>56</b>    |              |
|            |                | <b>Cash.....</b>                   |              | <b>56</b>    |
|            | <b>31</b>      | <b>Cash.....</b>                   | <b>90</b>    |              |
|            |                | <b>Accounts Payable .....</b>      |              | <b>90</b>    |

## PROBLEM 8-6A

Tom has created a situation that leaves many opportunities for undetected theft. Here is a list of some of the deficiencies in internal control. You may find others.

1. **Documentation procedures.** The tickets were unnumbered. By numbering the tickets, the students could have been held more accountable for the tickets. See number 3 below.
2. **Physical controls and establishment of responsibility.** The tickets were left in an unlocked box on his desk. Instead, Tom should have assigned control of the tickets to one individual, in a locked box which that student alone had control over.
3. **Documentation procedures.** No record was kept of which students took tickets to sell or how many they took. In combination with items 1 and 2 above, the student assigned control over the tickets should have kept a record of which tickets were issued to each student for resale. (Note: This problem could have been largely avoided if the tickets had only been sold at the door on the day of the dance.)
4. **Documentation procedures.** There was no control over unsold tickets. This deficiency made it possible for students to sell the tickets, keep the cash, and tell Tom that they had disposed of the unsold tickets. Instead, students should have been required to return the unsold tickets to the student maintaining control over tickets, and the cash to Tom. In each case, the students should have been issued a receipt for the cash they turned in and the tickets they returned.
5. **Establishment of responsibility.** Inadequate control over the cash box. In effect, it was operated like a petty cash fund, but too many people had the key. Instead, Tom should have had the key and dispersed funds when necessary for purchases.
6. **Documentation procedures.** Instead of receipts, students simply wrote notes saying how they used the funds. Instead, it should have been required that they provided a valid receipt.

## **PROBLEM 8-6A (Continued)**

- 7. Segregation of duties. Luke Gilmor counted the funds, made out the deposit slip, and took the funds to the bank. This made it possible for Luke Gilmor to take some of the money and deposit the rest since there was no external check on his work. Tom should have counted the funds, with someone observing him. Then he could have made out the deposit slip and had Luke Gilmor deposit the funds.**
  
- 8. Documentation procedures. Tom did not receive a receipt from Obnoxious Ed. Without a receipt, there is no way to verify how much Obnoxious Ed was actually paid. For example, it is possible that he was only paid \$100 and that Tom took the rest.**
  
- 9. Separation of duties. Mel Harris was collecting tickets and receiving cash for additional tickets sold. Instead, there should have been one person selling tickets at the door and a second person collecting tickets.**

**PROBLEM 8-1B**

**(a) Principles**

**Application to Starr Theater**

**Establishment of responsibility.**

**Only cashiers are authorized to sell tickets. Only the manager and cashier can handle cash.**

**Segregation of duties.**

**The duties of receiving cash and admitting customers are assigned to the cashier and to the usher. The manager maintains custody of the cash, and the company accountant records the cash.**

**Documentation procedures.**

**Tickets are prenumbered. Cash count sheets are prepared. Deposit slips are prepared.**

**Physical, mechanical, and electronic controls.**

**A safe is used for the storage of cash and a machine is used to issue tickets.**

**Independent internal verification.**

**Cash counts are made by the manager at the end of each cashier's shift. Daily comparisons are made by the company treasurer.**

**Other controls.**

**Cashiers are bonded.**

**(b) Actions by the usher and cashier to misappropriate cash might include:**

- (1) Instead of tearing the tickets, the usher could return the tickets to the cashier who could resell them, and the two could divide the cash.**
- (2) The cashier could issue a lower price ticket than paid for and the usher would admit the customer. The difference between the ticket issued and the cash received could be divided between the usher and cashier.**

|                     |
|---------------------|
| <b>PROBLEM 8-2B</b> |
|---------------------|

|     |      |    |  |        |  |        |
|-----|------|----|--|--------|--|--------|
| (a) | July | 1  | Petty Cash.....                        | 200.00 |  |        |
|     |      |    | Cash.....                              |        |  | 200.00 |
|     |      | 15 | Freight-out .....                      | 94.00  |  |        |
|     |      |    | Postage Expense.....                   | 42.40  |  |        |
|     |      |    | Entertainment Expense .....            | 45.90  |  |        |
|     |      |    | Miscellaneous Expense .....            | 10.70  |  |        |
|     |      |    | Cash Over and Short.....               | 1.30   |  |        |
|     |      |    | Cash .....                             |        |  | 194.30 |
|     |      | 31 | Freight-out .....                      | 82.10  |  |        |
|     |      |    | Charitable Contributions Expense ..... | 30.00  |  |        |
|     |      |    | Postage Expense.....                   | 47.80  |  |        |
|     |      |    | Miscellaneous Expense .....            | 32.10  |  |        |
|     |      |    | Cash .....                             |        |  | 192.00 |
|     | Aug. | 15 | Freight-out .....                      | 74.40  |  |        |
|     |      |    | Entertainment Expense .....            | 41.50  |  |        |
|     |      |    | Postage Expense.....                   | 33.00  |  |        |
|     |      |    | Miscellaneous Expense .....            | 36.00  |  |        |
|     |      |    | Cash Over and Short.....               | 3.10   |  |        |
|     |      |    | Cash .....                             |        |  | 188.00 |
|     |      | 16 | Petty Cash.....                        | 100.00 |  |        |
|     |      |    | Cash.....                              |        |  | 100.00 |
|     |      | 31 | Postage Expense.....                   | 145.00 |  |        |
|     |      |    | Entertainment Expense .....            | 90.60  |  |        |
|     |      |    | Freight-out .....                      | 46.00  |  |        |
|     |      |    | Cash Over and Short.....               | 1.40   |  |        |
|     |      |    | Cash .....                             |        |  | 283.00 |

(b)

**Petty Cash**

| Date    | Explanation | Ref. | Debit | Credit | Balance |
|---------|-------------|------|-------|--------|---------|
| July 1  |             | CP   | 200   |        | 200     |
| Aug. 16 |             | CP   | 100   |        | 300     |

**PROBLEM 8-2B (Continued)**

**(c) The internal control features of a petty cash fund include:**

- (1) A custodian is responsible for the fund.**
- (2) A prenumbered petty cash receipt signed by the custodian and the individual receiving payment is required for each payment from the fund.**
- (3) The treasurer's office examines all payments and stamps supporting documents to indicate they were paid when the fund is replenished.**
- (4) Surprise counts can be made at any time to determine whether the fund is intact.**

|                     |
|---------------------|
| <b>PROBLEM 8-3B</b> |
|---------------------|

(a)

**FLINT HILLS GENETICS COMPANY**  
**Bank Reconciliation**  
**May 31, 2008**

|  |                 |                          |
|--|-----------------|--------------------------|
| <b>Cash balance per bank statement</b> .....   |                 | <b>\$6,804.60</b>        |
| <b>Add: Deposit in transit</b> .....           | <b>\$936.15</b> |                          |
| <b>Bank error—Bohr check</b> .....             | <b>600.00</b>   | <b>1,536.15</b>          |
|  |                 | <b>8,340.75</b>          |
| <b>Less: Outstanding checks</b> .....          |                 | <b>515.25</b>            |
| <b>Adjusted cash balance per bank</b> .....    |                 | <b><u>\$7,825.50</u></b> |
|  |                 |                          |
| <b>Cash balance per books</b> .....            |                 | <b>\$6,781.50</b>        |
| <b>Add: Collection of note receivable</b>      |                 |                          |
| (\$2,000 note plus \$80 interest               |                 |                          |
| less \$25 fee).....                            |                 | <b>2,055.00</b>          |
|  |                 | <b>8,836.50</b>          |
| <b>Less: NSF check</b> .....                   | <b>\$934.00</b> |                          |
| <b>Error in May 12 deposit</b> .....           | <b>10.00</b>    |                          |
| <b>Error in recording check No. 1181</b> ..... | <b>27.00*</b>   |                          |
| <b>Check printing charge</b> .....             | <b>40.00</b>    | <b>1,011.00</b>          |
| <b>Adjusted cash balance per books</b> .....   |                 | <b><u>\$7,825.50</u></b> |

\*\$685 – \$658

|     |        |   |       |       |
|-----|--------|---|-------|-------|
| (b) | May 31 | Cash .....                              | 2,055 |       |
|     |        | Miscellaneous Expense .....             | 25    |       |
|     |        | Notes Receivable.....                   |       | 2,000 |
|     |        | Interest Revenue.....                   |       | 80    |
|     | 31     | Accounts Receivable—Tyler Gricius ..... | 934   |       |
|     |        | Cash.....                               |       | 934   |
|     | 31     | Sales.....                              | 10    |       |
|     |        | Cash.....                               |       | 10    |
|     | 31     | Accounts Payable—M. Datz .....          | 27    |       |
|     |        | Cash.....                               |       | 27    |
|     | 31     | Miscellaneous Expense .....             | 40    |       |
|     |        | Cash.....                               |       | 40    |

|                     |
|---------------------|
| <b>PROBLEM 8-4B</b> |
|---------------------|

(a) **CONLIN COMPANY**  
**Bank Reconciliation**  
**November 30, 2008**

|  |                 |                           |
|--|-----------------|---------------------------|
| <b>Balance per bank statement .....</b>      |                 | <b>\$17,069.40</b>        |
| <b>Add: Deposits in transit .....</b>        |                 | <b><u>2,338.00</u></b>    |
|  |                 | <b>19,407.40</b>          |
| <b>Less: Outstanding checks</b>              |                 |                           |
| No. 2451 .....                               | \$1,260.40      |                           |
| No. 2472 .....                               | 503.60          |                           |
| No. 2478 .....                               | 538.20          |                           |
| No. 2482 .....                               | 612.00          |                           |
| No. 2484 .....                               | 829.50          |                           |
| No. 2485 .....                               | 974.80          |                           |
| No. 2487 .....                               | 398.00          |                           |
| No. 2488 .....                               | <u>1,200.00</u> | <u>6,316.50</u>           |
| <b>Adjusted cash balance per bank .....</b>  |                 | <b><u>\$13,090.90</u></b> |
| <b>Balance per books .....</b>               |                 | <b>\$10,846.90</b>        |
| <b>Add: Note collected by bank</b>           |                 |                           |
| (\$2,400 note plus \$120 interest            |                 |                           |
| less \$15 fee) .....                         |                 | <u>2,505.00</u>           |
|  |                 | <b>13,351.90</b>          |
| <b>Less: Check printing charge .....</b>     | <b>\$ 72.00</b> |                           |
| Error in recording check No. 2479 .....      | <b>180.00*</b>  |                           |
| Error in 11-21 deposit                       |                 |                           |
| (\$2,954 – \$2,945) .....                    | <u>9.00</u>     | <u>261.00</u>             |
| <b>Adjusted cash balance per books .....</b> |                 | <b><u>\$13,090.90</u></b> |

\*\$1,750 – \$1,570



**PROBLEM 8-4B (Continued)**

|             |                            |       |       |
|-------------|----------------------------|-------|-------|
| (b) Nov. 30 | Cash .....                 | 2,505 |       |
|             | Miscellaneous Expense..... | 15    |       |
|             | Notes Receivable .....     |       | 2,400 |
|             | Interest Revenue .....     |       | 120   |
| 30          | Miscellaneous Expense..... | 72    |       |
|             | Cash .....                 |       | 72    |
| 30          | Accounts Payable.....      | 180   |       |
|             | Cash .....                 |       | 180   |
| 30          | Accounts Receivable.....   | 9     |       |
|             | Cash .....                 |       | 9     |

|                     |
|---------------------|
| <b>PROBLEM 8-5B</b> |
|---------------------|

(a) **BAUMGARDNER COMPANY**  
**Bank Reconciliation**  
**August 31, 2008**

|  |          |          |
|--|----------|----------|
| Cash balance per bank statement .....      |          | \$25,932 |
| Add: Deposits in transit (1).....          | \$ 7,890 |          |
| Bank error (\$278 – \$275) .....           | 3        | 7,893    |
|  |          | 33,825   |
| Less: Outstanding checks (2) .....         |          | 6,393    |
| Adjusted cash balance per bank.....        |          | \$27,432 |
|  |          |          |
| Cash balance per books.....                |          | \$20,330 |
| Add: Collection of note receivable by bank |          |          |
| (\$6,800 note plus \$130 interest).....    | \$ 6,930 |          |
| Book error (\$420 – \$240) .....           | 180      |          |
| Interest earned .....                      | 32       | 7,142    |
|  |          | 27,472   |
| Less: Safety deposit box rent .....        |          | 40       |
| Adjusted cash balance per books .....      |          | \$27,432 |
|  |          |          |
| (1) August receipts per books .....        |          | \$77,000 |
| August deposits per bank .....             | \$73,110 |          |
| Less: Deposits in transit, July 31 .....   | 4,000    | 69,110   |
| Deposits in transit, August 31 .....       |          | \$ 7,890 |
|  |          |          |
| (2) Disbursements per books in             |          |          |
| August .....                               |          | \$73,570 |
| Less: Book error .....                     |          | 180      |
| Total disbursements to be                  |          |          |
| accounted for .....                        |          | 73,390   |
| Checks clearing bank in                    |          |          |
| August .....                               | \$71,500 |          |
| Less: Bank error .....                     | \$ 3     |          |
| July 31 outstanding                        |          |          |
| checks.....                                | 4,500    | 4,503    |
| Outstanding checks,                        |          | 66,997   |
| August 31 .....                            |          | \$ 6,393 |

**PROBLEM 8-5B (Continued)**

|     |         |                             |       |       |
|-----|---------|-----------------------------|-------|-------|
| (b) | Aug. 31 | Cash .....                  | 6,930 |       |
|     |         | Notes Receivable .....      |       | 6,800 |
|     |         | Interest Revenue .....      |       | 130   |
|     | 31      | Cash .....                  | 32    |       |
|     |         | Interest Revenue .....      |       | 32    |
|     | 31      | Miscellaneous Expense ..... | 40    |       |
|     |         | Cash .....                  |       | 40    |
|     | 31      | Cash .....                  | 180   |       |
|     |         | Accounts Payable .....      |       | 180   |

|                     |
|---------------------|
| <b>PROBLEM 8-6B</b> |
|---------------------|

(a) **RICHARDSON COMPANY**  
**Bank Reconciliation**  
**October 31, 2008**

|   |               |                    |                 |
|---|---------------|--------------------|-----------------|
| <hr/>   |               |                    |                 |
| Balance per bank statement .....                      |               | \$18,180.00        |                 |
| Plus: Undeposited receipts .....                      |               | <u>3,795.51</u>    |                 |
|   |               | 21,975.51          |                 |
| Less: Outstanding checks                              |               |                    |                 |
| <u>No.</u>  | <u>Amount</u> | <u>No.</u>         | <u>Amount</u>   |
| 62  | \$126.75      | 862                | \$190.71        |
| 183   | 150.00        | 863                | 226.80          |
| 284   | 253.25        | 864                | 165.28 .....    |
|   |               |                    | <u>1,112.79</u> |
| Adjusted balance per bank.....                        |               | <u>\$20,862.72</u> |                 |
| Cash balance per books.....                           |               | \$21,892.72        |                 |
| Add: Bank credit (collection of note receivable)..... |               | <u>400.00</u>      |                 |
| Adjusted balance per books (before theft) .....       |               | 22,292.72          |                 |
| Theft .....   |               | <u>1,430.00*</u>   |                 |
| Adjusted balance per books .....                      |               | <u>\$20,862.72</u> |                 |

\*\$22,292.72 – \$20,862.72

(b) The cashier attempted to cover the theft of \$1,430.00 by:

1. Not listing as outstanding three checks totaling \$530.00 (No. 62, \$126.75; No. 183, \$150.00; and No. 284, \$253.25).
2. Underfooting the outstanding checks listed by \$100. (The correct total is \$582.79.)
3. Subtracting the \$400 bank credit from the book balance instead of adding it to the book balance, thereby concealing \$800 of the theft.

**PROBLEM 8-6B (Continued)**

- (c) 1. The principle of independent internal verification has been violated because the cashier prepared the bank reconciliation.
2. The principle of segregation of duties has been violated because the cashier had access to the accounting records and also prepared the bank reconciliation.

- (a) In the Independent Auditors' Report, it states that "consolidated financial statements referred to above [including the statement of cash flows] present fairly, in all material respects, the financial position of PepsiCo, Inc. and subsidiaries as of December 31, 2005 and December 25, 2004, and the results of their operations and their cash flows for each of the years in the three-year period ended December 31, 2005, in conformity with United States generally accepted accounting principles."
- (b) Cash and cash equivalents are reported at \$1,716 million for 2005 and \$1,280 million for 2004.
- (c) Cash equivalents are defined as "investments with original maturities of three months or less which we do not intend to rollover beyond three months."
- (d) PepsiCo's management states that "our system of internal control is based on the control criteria framework of the Committee of Sponsoring Organizations of the Treadway Commission published in their report titled, *Internal Control—Integrated Framework*. The system is designed to provide reasonable assurance that transactions are executed as authorized and accurately recorded; that assets are safeguarded; and that accounting records are sufficiently reliable to permit the preparation of financial statements that conform in all material respects with accounting principles generally accepted in the U.S. We maintain disclosure controls and procedures designed to ensure that information required to be disclosed in reports under the Securities Exchange Act of 1934 is recorded, processed summarized and reported within the specified time periods. We monitor these internal controls through self-assessments and an ongoing program of internal audits. Our internal controls are reinforced through our Worldwide Code of Conduct, which sets forth our commitment to conduct business with integrity, and within both the letter and the spirit of the law."

|         | <u>PepsiCo</u>         | <u>Coca-Cola</u>         |
|---------|------------------------|--------------------------|
| (a) (1) | \$1,716 million        | \$4,701 million          |
| (2)     | \$436 million increase | \$2,006 million decrease |
| (3)     | \$5,852 million        | \$6,423 million          |

- (b) Both companies generated over 5.5 billion dollars from operating activities. This cash is used for investing and financing activities. Both companies use the cash provided by operating activities to purchase land, buildings and equipment, to make acquisitions of other companies, to buy back their stock, and to pay dividends. Both companies have large cash balances at the end of 2005 and are capable of generating huge amounts of cash.

- (a) The system of internal control should be evaluated by: (1) responsible individuals from a particular university unit, (2) internal auditors, and (3) university management.**
  
- (b) Reconciliations ensure accuracy and completeness of transactions. In particular, a reconciliation ensures that all cash received is: (1) properly deposited in university bank accounts and (2) recorded accurately in the financial records. The reconciliation should be reviewed by the department manager.**
  
- (c) Some examples given of physical controls are a safe, vault, locked doors, campus police, computer passwords, and card key systems.**
  
- (d) Two ways to accomplish inventory counts are: (1) annual complete inventory or (2) cycle counting programs.**



- (a) The weaknesses in internal accounting control over collections are:
- (1) Each usher could take cash from the collection plates enroute to the basement office.
  - (2) The head usher counts the cash alone.
  - (3) The head usher's notation of the count is left in the safe.
  - (4) The financial secretary counts the cash alone.
  - (5) The financial secretary withholds \$150 to \$200 per week.
  - (6) The cash is vulnerable to robbery when kept in the safe overnight.
  - (7) Checks are made payable to "cash."
  - (8) The financial secretary has custody of the cash, maintains church records, and prepares the bank reconciliation.
- (b) The improvements should include the following:
- (1) The ushers should transfer their cash collections to a cash pouch (or bag) held by the head usher. The transfer should be witnessed by a member of the finance committee.
  - (2) The head usher and finance committee member should take the cash to the office. The cash should be counted by the head usher and the financial secretary in the presence of the finance committee member.
  - (3) Following the count, the financial secretary should prepare a deposit slip in duplicate for the total cash received, and the secretary should immediately deposit the cash in the bank's night deposit vault.
  - (4) At the end of each month, a member of the finance committee should prepare the bank reconciliation.
- (c) The policies that should be changed are:
- (1) Members should make checks payable to the church.
  - (2) A petty cash fund should be established for the financial secretary to be used for weekly cash expenditures and requests for replenishment of the fund should be sent to the chairperson of the finance committee for approval.
  - (3) The financial secretary should be bonded.
  - (4) The financial secretary should be required to take an annual vacation.

Mr. Jerry Mays  
Manhattan Company  
Main Street, USA

Dear Mr. Mays:

During our audit of your financial statements, we reviewed the internal controls over cash receipts. The weaknesses we discovered and our suggested improvements are listed below.

(a) Weaknesses

1. A list of checks received is not prepared by the person who opens the mail.
2. Mail is opened by only one person.
3. The cashier is allowed to open the mail.
4. The accounts receivable clerk is allowed to open the mail.

(b) Suggested Improvement

This list should be prepared so that it can later be compared with the daily cash summary. While this procedure does not assure that all checks will be listed, it does allow the company to verify that all checks on the list did get deposited.

When this occurs, there is no assurance that all incoming checks are forwarded to the cashier's department.

Under this arrangement, it is possible for the cashier to open the mail, prepare the cash summary and make the bank deposit. This involves no segregation of duties as the cashier controls the cash from the time it is received until it is deposited in the bank.

Again, there is poor segregation of duties. In this case, the clerk could writeoff a customer's account as uncollectible and then misappropriate the collection when it's received.

**BYP 8-5 (Continued)**

**(a) Weaknesses**

**(b) Suggested Improvement**

5. Mail receipts are deposited weekly. This makes the receipts vulnerable to robbery and to misappropriation. The receipts should be deposited intact daily.

**We would be pleased to discuss the weaknesses and our recommended improvements with you, at your convenience.**

**Yours sincerely,**

**Croix, Marais, and Kale  
Certified Public Accountants**

- (a) You, as assistant controller, may suffer some negative effects from Gena Schmitt, the financial vice-president, if you don't follow her instructions. Maybe the insurance company will react the way Gena suggests, but probably not.

If you comply and falsify the June 30 cash balance by holding the cash receipts book open for one day, you will suffer personally by sacrificing your integrity. If you are found out, you could be prosecuted for preparing a fraudulent report. The insurance company, as the lender and creditor, is deceived.

- (b) Holding the cash receipts book open in order to overstate the cash balance is a fraudulent, deceitful, unethical action. The financial vice-president should not encourage such behavior and a controller should not follow such instructions.
- (c) (1) You can follow the vice-president's instructions and misstate the cash balance—wrong! (2) You can advise the vice-president against holding the books open, prepare an accurate report, and have the vice-president or the president discuss the situation with the insurance company. It can be explained that the low cash balance was only temporary. Honesty is still the best policy.

**Answers are provided to students on the government website as they complete the ID Theft Faceoff quiz.**

