

# CHAPTER 5

## Balance Sheet and Statement of Cash Flows

### ANSWERS TO QUESTIONS

1. The balance sheet provides information about the nature and amounts of investments in enterprise resources, obligations to enterprise creditors, and the owners' equity in net enterprise resources. That information not only complements information about the components of income, but also contributes to financial reporting by providing a basis for (1) computing rates of return, (2) evaluating the capital structure of the enterprise, and (3) assessing the liquidity and financial flexibility of the enterprise.

LO: 1, Bloom: K, Difficulty: Simple, Time: 3-5, AACSB: Communication, AICPA BB: None, AICPA FC: Reporting, AICPA PC: Communication

2. Solvency refers to the ability of an enterprise to pay its debts as they mature. For example, when a company carries a high level of long-term debt relative to assets, it has lower solvency. Information on long-term obligations, such as long-term debt and notes payable, in comparison to total assets, can be used to assess resources that will be needed to meet these fixed obligations (such as interest and principal payments).

LO: 1, Bloom: K, Difficulty: Simple, Time: 3-5, AACSB: Communication, AICPA BB: None, AICPA FC: Reporting, AICPA PC: Communication

3. Financial flexibility is the ability of an enterprise to take effective actions to alter the amounts and timing of cash flows so it can respond to unexpected needs and opportunities. An enterprise with a high degree of financial flexibility is better able to survive bad times, to recover from unexpected setbacks, and to take advantage of profitable and unexpected investment opportunities. Generally, the greater the financial flexibility, the lower the risk of enterprise failure.

LO: 1, Bloom: K, Difficulty: Simple, Time: 3-5, AACSB: Communication, AICPA BB: None, AICPA FC: Reporting, AICPA PC: Communication

4. Some situations in which estimates affect amounts reported in the balance sheet include:
  - (a) allowance for doubtful accounts.
  - (b) depreciable lives and estimated salvage values for plant and equipment.
  - (c) warranty returns.
  - (d) determining the amount of revenues that should be recorded as unearned.

When estimates are required, there is subjectivity in determining the amounts. Such subjectivity can impact the usefulness of the information by reducing the degree to which the measures are faithful representations, either because of bias or lack of verifiability.

LO: 1, Bloom: K, Difficulty: Simple, Time: 3-5, AACSB: Communication, AICPA BB: None, AICPA FC: Measurement, Reporting, AICPA PC: Communication

5. A higher level of inventories increases current assets, which is in the numerator of the current ratio. Therefore, a higher inventory will increase the current ratio. In general, a higher current ratio indicates a company has better liquidity since there are more current assets relative to current liabilities.

**Note to instructors**—When inventories increase faster than sales, this may not be a good signal about liquidity. That is, inventory can only be used to meet current obligations when it is sold (and converted to cash). That is why some analysts use a liquidity ratio—the acid-test ratio—that excludes inventories from current assets in the numerator.

LO: 1, Bloom: C, Difficulty: Simple, Time: 3-5, AACSB: Communication, AICPA BB: None, AICPA FC: Reporting, AICPA PC: Communication

6. Liquidity describes the amount of time that is expected to elapse until an asset is converted into cash or until a liability has to be paid. The ranking of the assets given in order of liquidity is:
  - (1) (d) Short-term investments
  - (2) (e) Accounts receivable
  - (3) (b) Inventory
  - (4) (c) Buildings

(5) (a) Goodwill

LO: 1, 2, Bloom: K, Difficulty: Simple, Time: 3-5, AACSB: Communication, AICPA BB: None, AICPA FC: Reporting, AICPA PC: Communication

**Questions Chapter 5 (Continued)**

7. The major limitations of the balance sheet are:

- (a) The values stated are generally historical and not at fair value.
- (b) Estimates are used in many instances, such as in determining the collectibility of receivables or finding the approximate useful life of long-term tangible and intangible assets.
- (c) Many items, even though they have financial value to the business, are not recorded. One example is the value of a company's human resources.

LO: 1, Bloom: K, Difficulty: Simple, Time: 3-5, AACSB: Communication, AICPA BB: None, AICPA FC: Reporting, AICPA PC: Communication

8. Some items of value to technology companies such as Intel or IBM are the value of research and development (new products that are being developed but which are not yet marketable), the value of the "intellectual capital" of its workforce (the ability of the companies' employees to come up with new ideas and products in the fast-changing technology industry), and the value of the company reputation or name brand. In most cases, the reasons why the value of these items are not recorded in the balance sheet concern the lack of faithful representation of the estimates of the future cash flows that will be generated by these "assets" (for all three types) and the ability to control the use of the asset (in the case of employees). Being able to reliably measure the expected future benefits and to control the use of an item are essential elements of the definition of an asset, according to the Conceptual Framework.

LO: 1, Bloom: C, Difficulty: Simple, Time: 3-5, AACSB: Communication, AICPA BB: None, AICPA FC: Measurement, Reporting, AICPA PC: Communication

9. Classification in financial statements helps users by grouping items with similar characteristics and separating items with different characteristics. Current assets are expected to be converted to cash within one year or the operating cycle, whichever is longer—property, plant, and equipment will provide cash inflows over a longer period of time. Thus, separating long-term assets from current assets facilitates computation of useful ratios, especially liquidity ratios such as the current ratio.

LO: 21,2, Bloom: K, Difficulty: Simple, Time: 3-5, AACSB: Communication, AICPA BB: None, AICPA FC: Reporting, AICPA PC: Communication

10. Separate amounts should be reported for accounts receivable and notes receivable. The amounts should be reported gross, and an amount for the allowance for doubtful accounts should be deducted. The amount and nature of any nontrade receivables and any amounts designated or pledged as collateral should be clearly identified.

LO: 2, Bloom: K, Difficulty: Simple, Time: 3-5, AACSB: Communication, AICPA BB: None, AICPA FC: Measurement, Reporting, AICPA PC: Communication

11. No. Available-for-sale securities should be reported as a current asset only if management expects to convert them into cash as needed within one year or the operating cycle, whichever is longer. If available-for-sale securities are not held with this expectation, they should be reported as long-term investments.

LO: 1, Bloom: K, Difficulty: Simple, Time: 3-5, AACSB: Communication, AICPA BB: None, AICPA FC: Reporting, AICPA PC: Communication

12. The relationship between current assets and current liabilities is that current liabilities are those obligations that are reasonably expected to be liquidated either through the use of current assets or the creation of other current liabilities.

LO: 1, Bloom: K, Difficulty: Simple, Time: 3-5, AACSB: Communication, AICPA BB: None, AICPA FC: Reporting, AICPA PC: Communication

13. The total selling price of the season tickets is \$20,000,000 (10,000 X \$2,000). Of this amount, \$8,000,000 has been earned by 12/31/20 (16/40 X \$20,000,000). The remaining \$12,000,000 should be reported as unearned revenue, a current liability in the 12/31/20 balance sheet (24/40 X \$20,000,000) or (\$20,000,000 - \$8,000,000).

LO: 1, Bloom: K, Difficulty: Simple, Time: 3-5, AACSB: Communication, AICPA BB: None, AICPA FC: Measurement, Reporting, AICPA PC: Communication

## Questions Chapter 5 (Continued)

14. Working capital is the excess of total current assets over total current liabilities. This excess is sometimes called net working capital. Working capital represents the net amount of a company's relatively liquid resources. That is, it is the liquidity buffer available to meet the financial demands of the operating cycle.

LO: 1, 2, Bloom: K, Difficulty: Simple, Time: 3-5, AACSB: Communication, AICPA BB: None, AICPA FC: Reporting, AICPA PC: Communication

15. (a) Stockholders' Equity. "Treasury stock (at cost)."  
**Note:** This is a reduction of total stockholders' equity (reported as contra-equity).  
(b) Current Assets. Included in "Cash."  
(c) Long-Term Investments. "Land held as an investment."  
(d) Long-Term Investments. "Sinking fund."  
(e) Long-term debt (adjunct account to bonds payable). "Unamortized premium on bonds payable."  
(f) Intangible Assets. "Copyrights."  
(g) Investments. "Employees' pension fund," with subcaptions of "Cash" and "Securities" if desired. (Assumes that the company still owns these assets.)  
(h) Stockholders' Equity. "Additional paid-in capital."  
(i) Investments. Nature of investments should be given together with parenthetical information as follows: "pledged to secure loans payable to banks."

LO: 1, Bloom: K, Difficulty: Simple, Time: 5-7, AACSB: AICPA BB: None, AICPA BB: None, AICPA FC: Reporting, AICPA PC: None

16. (a) Allowance for doubtful accounts should be deducted from accounts receivable in current assets.  
(b) Merchandise held on consignment should not appear on the consignee's balance sheet except possibly as a note to the financial statements.  
(c) Advances received on sales contract are normally a current liability and should be shown as such in the balance sheet.  
(d) Cash surrender value of life insurance should be shown as a long-term investment.  
(e) Land should be reported in property, plant, and equipment unless held for investment.  
(f) Merchandise out on consignment should be shown among current assets under the heading of inventory.  
(g) Franchises should be itemized in a section for intangible assets.  
(h) Accumulated depreciation of plant and equipment should be deducted from the equipment account.  
(i) Materials in transit should not be shown on the balance sheet of the buyer if purchased f.o.b. destination.

LO: 1, Bloom: K, Difficulty: Simple, Time: 5-7, AACSB: AICPA BB: None, AICPA BB: None, AICPA FC: Reporting, AICPA PC: None

17. (a) Trade accounts receivable should be stated at their estimated amount collectible, often referred to as net realizable value. The method most generally followed is to deduct from the total accounts receivable the amount of the allowance for doubtful accounts.  
(b) Land is generally stated in the balance sheet at cost.  
(c) Inventories are generally stated at the lower-of-cost-or-net realizable value. If LIFO or retail inventory methods are used, market is used instead of net realizable value.  
(d) Trading securities (consisting of common stock of other companies) are stated at fair value.  
(e) Prepaid expenses should be stated at cost less the amount apportioned to and written off over the previous accounting periods.

LO: 1, Bloom: K, Difficulty: Simple, Time: 3-5, AACSB: AICPA BB: None, AICPA BB: None, AICPA FC: Reporting, AICPA PC: None

18. Assets are defined as probable future economic benefits obtained or controlled by a particular entity as a result of past transactions or events. If a building is leased under a capital lease, the future economic benefits of using the building are controlled by the lessee (tenant) as the result of a past event (the signing of a lease agreement).

LO: 1, Bloom: K, Difficulty: Simple, Time: 3-5, AACSB: Communication, AICPA BB: None, AICPA FC: Reporting, AICPA PC: Communication

## Questions Chapter 5 (Continued)

19. Battle is incorrect. Retained earnings is a **source** of assets, but is not an asset itself. For example, even though the funds obtained from issuing a note payable are invested in the business, the note payable is not reported as an asset. It is a **source** of assets, but it is reported as a liability because the company has an obligation to repay the note in the future. Similarly, even though the earnings are invested in the business, retained earnings is not reported as an asset. It is reported as part of shareholders' equity because it is, in effect, an investment by owners which increases the ownership interest in the assets of an entity.

LO: 1, Bloom: C, M Difficulty: Moderate, Time: 3-5, AACSB: Communication, AICPA BB: None, AICPA FC: Reporting, AICPA PC: Communication

20. The notes should appear as long-term liabilities with full disclosure as to their terms. Each year, as the profit is determined, notes of an amount equal to two-thirds of the year's profits should be transferred from the long-term liabilities to current liabilities until all of the notes have been liquidated.

LO: 2, Bloom: K, Difficulty: Simple, Time: 3-5, AACSB: Communication, AICPA BB: None, AICPA FC: Reporting, AICPA PC: Communication

21. The purpose of a statement of cash flows is to provide relevant information about the cash receipts and cash payments of an enterprise during a period. It differs from the balance sheet and the income statement in that it reports the sources and uses of cash by operating, investing, and financing activity classifications. While the income statement and the balance sheet are accrual basis statements, the statement of cash flows is a cash basis statement—noncash items are omitted.

LO: 3, Bloom: K, Difficulty: Simple, Time: 3-5, AACSB: Communication, AICPA BB: None, AICPA FC: Reporting, AICPA PC: Communication

22. The difference between these two amounts may be due to increases in current assets (e.g., an increase in accounts receivable from a sale on account would result in an increase in revenue and net income but have no effect yet on cash). Similarly, a cash payment that results in a decrease in an existing current liability (e.g., accounts payable would decrease cash provided by operations without affecting net income).

LO: 3, Bloom: K, Difficulty: Simple, Time: 3-5, AACSB: Communication, AICPA BB: None, AICPA FC: Reporting, AICPA PC: Communication

23. The difference between these two amounts could be due to noncash charges that appear in the income statement. Examples of noncash charges are depreciation, depletion, and amortization of intangibles. Expenses recorded but unpaid (e.g., increase in accounts payable) and collection of previously recorded sales on credit (i.e., now decreasing accounts receivable) also would cause cash provided by operating activities to exceed net income.

LO: 3, Bloom: K, Difficulty: Simple, Time: 3-5, AACSB: Communication, AICPA BB: None, AICPA FC: Reporting, AICPA PC: Communication

24. **Operating activities** involve the cash effects of transactions that enter into the determination of net income. **Investing activities** include making and collecting loans and acquiring and disposing of debt and equity instruments; property, plant, and equipment and intangibles. **Financing activities** involve long-term liability and stockholders' equity items and include obtaining capital from owners and providing them with a return on (dividends) and a return of their investment and borrowing money from creditors and repaying the amounts borrowed.

LO: 3, Bloom: K, Difficulty: Simple, Time: 3-5, AACSB: Communication, AICPA BB: None, AICPA FC: Reporting, AICPA PC: Communication

**Questions Chapter 5 (Continued)**

25. (a) Net income is adjusted downward by deducting \$5,000 (\$39,000 - \$34,000) from \$90,000 and reporting cash provided by operating activities as \$85,000.

(b) The issuance of the preferred stock is a financing activity. The issuance is reported as follows:  
 Cash flows from financing activities  
     Issuance of preferred stock (10,000 shares X \$115) ..... \$1,150,000

(c) Net income is adjusted as follows:  
 Cash flows from operating activities  
     Net income..... \$90,000  
     Adjustments to reconcile net income to net  
     cash provided by operating activities:  
         Depreciation expense ..... 14,000  
         Bond premium amortization ..... (5,000)  
     Net cash provided by operating activities ..... \$99,000

(d) The increase of \$20,000 reflects an investing activity. The increase in Land is reported as follows:  
 Cash flows from investing activities:  
     Purchase Land (\$10,000 - \$30,000)..... \$(20,000)

LO: 3, Bloom: C, Difficulty: Simple, Time: 5-7, AACSB: Communication, AICPA BB: None, AICPA FC: Reporting, AICPA PC: Communication

26. The company appears to have good liquidity and reasonable financial flexibility. Its current cash debt coverage is  $1.20 \left( \frac{\$1,200,000}{\$1,000,000} \right)$ , which indicates that it can pay off its current liabilities in a given year from its operations. In addition, its cash debt coverage is also good at  $0.80 \left( \frac{\$1,200,000}{\$1,500,000} \right)$ , which indicates that it can pay off approximately 80% of its debt out of current operations.

LO: 5, Bloom: AP, Difficulty: Simple, Time: 3-5, AACSB: Analytic, Communication, AICPA BB: None, AICPA FC: Reporting, AICPA PC: Communication

27. Free cash flow = \$860,000 – \$75,000 – \$30,000 = \$755,000.

LO: 5, Bloom: AP, Difficulty: Simple, Time: 3-5, AACSB: Analytic, Communication, AICPA BB: None, AICPA FC: Reporting, AICPA PC: Communication

28. Free cash flow is net cash provided by operating activities less capital expenditures and dividends. The purpose of free cash flow analysis is to determine the amount of discretionary cash flow a company has for purchasing additional investments, retiring its debt, purchasing treasury stock, or simply adding to its liquidity and financial flexibility.

LO: 5, Bloom: K, Difficulty: Simple, Time: 3-5, AACSB: Communication, AICPA BB: None, AICPA FC: Reporting, AICPA PC: Communication

## Questions Chapter 5 (Continued)

29. Some of the techniques of disclosure for the balance sheet are:

- (a) Parenthetical explanations.
- (b) Notes to the financial statements.
- (c) Cross-references and contra items.
- (d) Supporting schedules.

LO: 4, Bloom: K, Difficulty: Simple, Time: 3-5, AACSB: Communication, AICPA BB: None, AICPA FC: Reporting, AICPA PC: Communication

30. A note entitled "Summary of Significant Accounting Policies" would indicate the basic accounting principles used by that enterprise. This note should be very useful from a comparative standpoint since it should be easy to determine whether the company uses the same accounting policies as other companies in the same industry.

LO: 4, Bloom: K, Difficulty: Simple, Time: 3-5, AACSB: Communication, AICPA BB: None, AICPA FC: Reporting, AICPA PC: Communication

31. General debt obligations, lease contracts, pension arrangements and stock option plans are four items for which disclosure is mandatory in the financial statements. The reason for disclosing these contractual situations is that these commitments are of a long-term nature, are often significant in amount, and are very important to the company's well-being.

LO: 4, Bloom: K, Difficulty: Simple, Time: 3-5, AACSB: Communication, AICPA BB: None, AICPA FC: Reporting, AICPA PC: Communication

32. The profession has recommended that the use of the term "surplus" be discontinued in balance sheet presentations of stockholders' equity. This term has a connotation outside accounting that is quite different from its meaning in the accounts or in the balance sheet. The use of the terms capital surplus, paid-in surplus, and earned surplus is confusing to the nonaccountant and leads to misinterpretation.

LO: 4, Bloom: K, Difficulty: Simple, Time: 3-5, AACSB: Communication, AICPA BB: None, AICPA FC: Reporting, AICPA PC: Communication

## SOLUTIONS TO BRIEF EXERCISES

### BRIEF EXERCISE 5.1

#### Current assets

Cash.....		\$ 30,000
Accounts receivable.....	\$110,000	
Less: Allowance for doubtful accounts ..	8,000	102,000
Inventory .....		290,000
Prepaid insurance.....		9,500
Total current assets.....		\$431,500

LO: 2, Bloom: AP, Difficulty: Simple, Time: 5-7, AACSB: Analytic, AICPA BB: None, AICPA FC: Reporting, AICPA PC: None

### BRIEF EXERCISE 5.2

#### Current assets

Cash.....		\$ 7,000
Equity Investments .....		11,000
Accounts receivable.....	\$90,000	
Less: Allowance for doubtful accounts ..	4,000	86,000
Inventory .....		30,000
Prepaid insurance.....		5,200
Total current assets.....		\$139,200

LO: 2, Bloom: AP, Difficulty: Simple, Time: 5-7, AACSB: Analytic, AICPA BB: None, AICPA FC: Reporting, AICPA PC: None

### BRIEF EXERCISE 5.3

#### Long-term investments

Debt investments.....		\$ 56,000
Land held for investment .....		39,000
Note receivables (long-term) .....		42,000
Total investments .....		\$137,000

LO: 2, Bloom: AP, Difficulty: Simple, Time: 5-7, AACSB: Analytic, AICPA BB: None, AICPA FC: Reporting, AICPA PC: None

#### BRIEF EXERCISE 5.4

##### Property, plant, and equipment

Land .....		\$ 71,000
Buildings .....	\$207,000	
Less: Accumulated depreciation .....	<u>45,000</u>	162,000
Equipment .....	190,000	
Less: Accumulated depreciation .....	<u>19,000</u>	171,000
Timberland .....		<u>70,000</u>
Total property, plant, and equipment ..		<u>\$474,000</u>

LO: 2, Bloom: AP, Difficulty: Simple, Time: 5-7, AACSB: Analytic, AICPA BB: None, AICPA FC: Reporting, AICPA PC: None

#### BRIEF EXERCISE 5.5

##### Intangible assets

Goodwill .....		\$150,000
Patents.....		220,000
Franchises.....		<u>130,000</u>
Total intangible assets .....		<u>\$500,000</u>

LO: 2, Bloom: AP, Difficulty: Simple, Time: 5-7, AACSB: Analytic, AICPA BB: None, AICPA FC: Reporting, AICPA PC: None

#### BRIEF EXERCISE 5.6

##### Intangible assets

Goodwill .....		\$ 50,000
Franchises.....		47,000
Patents.....		33,000
Trademarks .....		<u>10,000</u>
Total intangible assets .....		<u>\$140,000</u>

LO: 2, Bloom: AP, Difficulty: Simple, Time: 5-7, AACSB: Analytic, AICPA BB: None, AICPA FC: Reporting, AICPA PC: None

#### BRIEF EXERCISE 5.7

##### Current liabilities

Notes payable .....		\$ 22,500
Accounts payable .....		72,000
Salaries and wages payable.....		4,000
Income taxes payable.....		<u>7,000</u>
Total current liabilities .....		<u>\$105,500</u>

LO: 2, Bloom: AP, Difficulty: Simple, Time: 5-7, AACSB: Analytic, AICPA BB: None, AICPA FC: Reporting, AICPA PC: None

**BRIEF EXERCISE 5.8**

**Current liabilities**

Accounts payable .....		\$220,000
Unearned rent revenue.....		41,000
Salaries and wages payable .....		27,000
Interest payable .....		12,000
Income taxes payable.....		<u>29,000</u>
Total current liabilities.....		<u>\$329,000</u>

LO: 2, Bloom: AP, Difficulty: Simple, Time: 5-7, AACSB: Analytic, AICPA BB: None, AICPA FC: Reporting, AICPA PC: None

**BRIEF EXERCISE 5.9**

**Long-term liabilities**

Bonds payable .....	\$400,000	
Less: Discount on bonds payable .....	<u>29,000</u>	\$371,000
Pension liability .....		<u>375,000</u>
Total long-term liabilities.....		<u>\$746,000</u>

LO: 2, Bloom: AP, Difficulty: Simple, Time: 5-7, AACSB: Analytic, AICPA BB: None, AICPA FC: Reporting, AICPA PC: None

**BRIEF EXERCISE 5.10**

**Stockholders' equity**

Common stock.....	\$750,000	
Paid-in capital in excess of par .....	<u>200,000</u>	\$950,000
Retained earnings.....		120,000
Accumulated other comprehensive loss .....		<u>(150,000)</u>
Equity attributable to Hawthorn Corporation		920,000
Noncontrolling interest .....		<u>35,000</u>
Total stockholders' equity .....		<u>\$955,000</u>

LO: 2, Bloom: AP, Difficulty: Simple, Time: 5-7, AACSB: Analytic, AICPA BB: None, AICPA FC: Reporting, AICPA PC: None

**BRIEF EXERCISE 5.11**

**Stockholders' equity**

Preferred stock .....		\$152,000
Common stock .....		55,000
Additional paid-in capital .....		174,000
Retained earnings.....		<u>114,000</u>
Equity attributable to Stowe Company.....		495,000
Noncontrolling interest .....		<u>63,000</u>
<b>Total stockholders' equity.....</b>		<b><u>\$558,000</u></b>

LO: 2, Bloom: AP, Difficulty: Simple, Time: 5-7, AACSB: Analytic, AICPA BB: None, AICPA FC: Reporting, AICPA PC: None

**BRIEF EXERCISE 5.12**

**Cash Flow Statement**

**Operating Activities**

Net income.....		\$40,000
Depreciation expense .....	\$ 4,000	
Increase in accounts receivable .....	(10,000)	
Increase in accounts payable.....	<u>7,000</u>	<u>1,000</u>
<b>Net cash provided by operating activities....</b>		<b>41,000</b>

**Investing Activities**

Purchase of equipment.....		(8,000)
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**Financing Activities**

Issue notes payable .....	20,000	
Dividends paid.....	<u>(5,000)</u>	
<b>Net cash flow from financing activities ....</b>		<b><u>15,000</u></b>
<b>Net increase in cash (\$41,000 – \$8,000 + \$15,000) ..</b>		<b><u>\$48,000</u></b>

**Free Cash Flow = \$41,000 (Net cash provided by operating activities) – \$8,000 (Purchase of equipment) – \$5,000 (Dividends) = \$28,000.**

LO: 3, 5, Bloom: AP, Difficulty: Simple, Time: 10-15, AACSB: Analytic, AICPA BB: None, AICPA FC: Reporting, AICPA PC: None

**BRIEF EXERCISE 5.13**

**Cash flows from operating activities**

Net income .....		\$151,000
Adjustments to reconcile net income to net cash provided by operating activities		
Depreciation expense .....	\$44,000	
Increase in accounts payable .....	9,500	
Increase in accounts receivable .....	<u>(13,000)</u>	<u>40,500</u>
Net cash provided by operating activities.....		<u>\$191,500</u>

LO: 3, Bloom: AP, Difficulty: Simple, Time: 5-7, AACSB: Analytic, AICPA BB: None, AICPA FC: Reporting, AICPA PC: None

**BRIEF EXERCISE 5.14**

Sale of land and building.....		\$191,000
Purchase of land .....		(37,000)
Purchase of equipment .....		<u>(53,000)</u>
Net cash provided by investing activities .....		<u>\$101,000</u>

LO: 3, Bloom: AP, Difficulty: Simple, Time: 5-7, AACSB: Analytic, AICPA BB: None, AICPA FC: Reporting, AICPA PC: None

**BRIEF EXERCISE 5.15**

Issuance of common stock .....		\$147,000
Purchase of treasury stock .....		(40,000)
Payment of cash dividend .....		(95,000)
Retirement of bonds .....		<u>(100,000)</u>
Net cash used by financing activities.....		<u>\$ (88,000)</u>

LO: 3, Bloom: AP, Difficulty: Simple, Time: 5-7, AACSB: Analytic, AICPA BB: None, AICPA FC: Reporting, AICPA PC: None

**BRIEF EXERCISE 5.16**

**Free Cash Flow Analysis**

Net cash provided by operating activities .....		\$400,000
Purchase of equipment .....		(53,000)
Purchase of land* .....		(37,000)
Dividends .....		<u>(95,000)</u>
Free cash flow.....		<u>\$215,000</u>

**\*If the land were purchased as an investment, it would be excluded in the computation of free cash flow.**

LO: 5, Bloom: AP, Difficulty: Simple, Time: 5-7, AACSB: Analytic, AICPA BB: None, AICPA FC: Reporting, AICPA PC: None

## SOLUTIONS TO EXERCISES

### EXERCISE 5.1 (15–20 minutes)

- (a) If the debt investment (bonds) is readily marketable and held primarily for sale in the near term to generate income on short-term price differences, then the account should appear as a current asset and be included with trading securities. Available-for-sale securities are classified as current or noncurrent depending upon the circumstances. If the debt investment is a held-to-maturity investment, then it would be reported as noncurrent.
- (b) If the company accounts for the treasury stock on the cost basis, the account is shown as a reduction of total stockholders' equity.
- (c) Stockholders' equity.
- (d) Current liability.
- (e) Property, plant, and equipment (as a deduction).
- (f) If the warehouse in process of construction is being constructed for another party, it is classified as an inventory account in the current assets section. This account will be shown net of any billings on the contract. On the other hand, if the warehouse is being constructed for the use of this particular company, it should be classified as a separate item in the property, plant, and equipment section.
- (g) Current asset.
- (h) Current liability.
- (i) Stockholder's equity (Retained earnings).

### EXERCISE 5.1 (Continued)

- (j) Equity investments are reported as current assets if the shares are expected to be sold within one year. Otherwise, the equity investment is reported in the Investments section.
- (k) Current liability.
- (l) Current liability.
- (m) Current asset (inventory).
- (n) Current liability.

LO: 1, 2; Bloom: C, Difficulty: Simple, Time: 15-20, AACSB: AICPA BB: None, AICPA BB: None, AICPA FC: Reporting, AICPA PC: Communication

### EXERCISE 5.2 (15–20 minutes)

- |         |         |
|---------|---------|
| 1. (h)  | 11. (b) |
| 2. (d)  | 12. (f) |
| 3. (f)  | 13. (a) |
| 4. (f)  | 14. (h) |
| 5. (c)  | 15. (c) |
| 6. (a)  | 16. (b) |
| 7. (f)  | 17. (a) |
| 8. (g)  | 18. (a) |
| 9. (a)  | 19. (g) |
| 10. (a) | 20. (f) |

LO: 1, 2, Bloom: C, Difficulty: Simple, Time: 15-20, AACSB: AICPA BB: None, AICPA BB: None, AICPA FC: Reporting, AICPA PC: None

**EXERCISE 5.3 (15–20 minutes)**

- |        |                                 |
|--------|---------------------------------|
| 1. (a) | 10. (f)                         |
| 2. (b) | 11. (a)                         |
| 3. (f) | 12. (f)                         |
| 4. (a) | 13. (a) or (e) (preferably (a)) |
| 5. (f) | 14. (c) and (n)                 |
| 6. (h) | 15. (f)                         |
| 7. (j) | 16. (x)                         |
| 8. (d) | 17. (f)                         |
| 9. (a) | 18. (c)                         |
|        | 19. (i)                         |

LO: 1, 2; Bloom: C, Difficulty: Simple, Time: 15-20, AACSB: AICPA BB: None, AICPA BB: None, AICPA FC: Reporting, AICPA PC: None

**EXERCISE 5.4 (30–35 minutes)**

**Denis Savard Inc.  
Balance Sheet  
December 31, 20–**

<u>Assets</u>			
<b><u>Current assets</u></b>			
Cash .....	\$XXX		
Less: Cash restricted for plant expansion .....	<u>XXX</u>	\$XXX	
Accounts receivable .....	XXX		
Less: Allowance for doubtful accounts .....	<u>XXX</u>	XXX	
Notes receivable .....		XXX	
Receivables—officers.....		XXX	
<b>Inventories</b>			
Finished goods.....	XXX		
Work in process .....	XXX		
Raw materials .....	<u>XXX</u>	<u>XXX</u>	
Total current assets .....			\$XXX
<b><u>Long-term investments</u></b>			
Preferred stock investments .....		XXX	
Land held for future plant site.....		XXX	
Restricted cash (plant expansion).....		<u>XXX</u>	
Total long-term investments .....			XXX
<b><u>Property, plant, and equipment</u></b>			
Buildings .....		XXX	
Less: Accum. depreciation— buildings .....		<u>XXX</u>	XXX
<b><u>Intangible assets</u></b>			
Copyrights.....			<u>XXX</u>
Total assets .....			<u>\$XXX</u>

EXERCISE 5.4 (Continued)

Liabilities and Stockholders' Equity

Current liabilities

Notes payable, short-term .....	\$XXX	
Salaries and wages payable .....	XXX	
Unearned subscriptions revenue.....	XXX	
Unearned rent revenue .....	<u>XXX</u>	
Total current liabilities .....		\$XXX

Long-term debt

Bonds payable, due in four years .....	\$XXX	
Less: Discount on bonds payable .....	<u>XXX</u>	<u>XXX</u>
Total liabilities .....		XXX

Stockholders' equity

<u>Capital stock:</u>		
Common stock .....	XXX	
<u>Additional paid-in capital:</u>		
Paid-in capital in excess of par (common stock).....	<u>XXX</u>	
Total paid-in capital.....	XXX	
Retained earnings .....	<u>XXX</u>	
Total paid-in capital and retained earnings.....	XXX	
Less: Treasury stock, at cost .....	<u>(XXX)</u>	
Equity attributable to Denis Savard, Inc. ....		XXX
Equity attributed to noncontrolling interest		<u>XXX</u>
Total stockholders' equity .....		<u>XXX</u>
Total liabilities and stockholders' equity.....		<u>\$XXX</u>

**Note to instructor:** An assumption made here is that cash included the restricted cash for plant expansion. If it did not, then a subtraction from cash would not be necessary or the cash balance would be “grossed up” and then the restricted cash for plant expansion deducted.

LO: 1, 2, Bloom: AP, Difficulty: Simple, Time: 30-35, AACSB: Analytic, AICPA BB: None, AICPA FC: Reporting, AICPA PC: None

**EXERCISE 5.5 (30–35 minutes)**

**Uhura Company  
Balance Sheet  
December 31, 2020**

<u>Assets</u>			
<u>Current assets</u>			
Cash .....		\$230,000	
Equity investments, at fair value .....		120,000	
Accounts receivable (\$340,000 + \$17,000)	\$357,000		
Less: Allowance for doubtful accounts .....	17,000	340,000	
Inventory, at lower-of-average cost-or-market.....		401,000	
Prepaid expenses .....		12,000	
Total current assets .....			\$1,103,000
<u>Long-term investments</u>			
Land held for future use .....		175,000	
Cash surrender value of life insurance.....		90,000	265,000
<u>Property, plant, and equipment</u>			
Buildings (\$570,000 + \$160,000).....	\$730,000		
Less: Accum. depr.—buildings.....	160,000	570,000	
Equipment (\$160,000 + \$105,000).....	265,000		
Less: Accum. depr.—equipment.....	105,000	160,000	730,000
<u>Intangible assets</u>			
Goodwill.....			80,000
Total assets .....			<b>\$2,178,000</b>

EXERCISE 5.5 (Continued)

**Liabilities and Stockholders' Equity**

**Current liabilities**

Notes payable (due 2021) .....		\$ 125,000	
Accounts payable .....		125,000	
Rent payable.....		<u>49,000</u>	
Total current liabilities .....			\$309,000

**Long-term liabilities**

Bonds payable.....	\$500,000		
Add: Premium on bonds payable.....	<u>53,000</u>	553,000	
Pension obligation .....		<u>82,000</u>	<u>635,000</u>
Total liabilities .....			944,000

**Stockholders' equity**

Common stock, \$1 par, authorized 400,000 shares, issued 290,000 shares .....	290,000		
Additional paid-in capital.....	<u>160,000</u>	450,000	
Retained earnings .....		<u>784,000*</u>	
Total stockholders' equity .....			<u>1,234,000</u>
Total liabilities and stockholders' equity .....			<u>\$2,178,000</u>

\*\$2,178,000 – \$944,000 – \$450,000

LO: 2, Bloom: AN, Difficulty: Simple, Time: 30-35, AACSB: Analytic, AICPA BB: None, AICPA FC: Reporting, AICPA PC: None

**EXERCISE 5.6 (30–35 minutes)**

**Geronimo Company  
Balance Sheet  
July 31, 2020**

<u>Assets</u>		
<u>Current assets</u>		
Cash .....		\$60,000*
Accounts receivable .....	\$38,700**	
Less: Allowance for doubtful accounts .....	3,500	35,200
Inventory .....		65,300***
Total current assets .....		\$160,500
 <u>Long-term investments</u>		
Bond sinking fund .....		15,000
 <u>Property, plant, and equipment</u>		
Equipment .....		112,000
Less: Accumulated depreciation— equipment .....	28,000	84,000
 <u>Intangible assets</u>		
Patents .....		21,000
Total assets .....		\$280,500

\*(\$69,000 – \$15,000 + \$6,000)

\*\*(\$44,000 – \$5,300)

\*\*\*(\$60,000 + \$5,300)

EXERCISE 5.6 (Continued)

**Liabilities and Stockholders' Equity**

**Current liabilities**

Notes and accounts payable .....	\$ 44,000	
Income taxes payable .....	<u>6,000</u>	
Total current liabilities .....		\$ 50,000

<b><u>Long-term liabilities</u></b> .....	<u>75,000</u>	
Total liabilities .....		125,000

<b><u>Stockholders' equity</u></b> .....	<u>155,500</u>	
Total liabilities and stock- holders' equity .....		<u>\$280,500</u>

LO: 1, 2, Bloom: AN, Difficulty: Complex, Time: 30-35, AACSB: Analytic, AICPA BB: None, AICPA FC: Reporting, AICPA PC: None

**EXERCISE 5.7 (15–20 minutes)**

**Current assets**

Cash.....	\$ 87,000*	
Less: Restricted cash (plant expansion).....	<u>50,000</u>	\$ 37,000
Debt investments (at fair value; cost, \$31,000).....		29,000
Accounts receivable (of which \$50,000 is pledged as collateral on a bank loan).....	161,000	
Less: Allowance for doubtful accounts.....	<u>12,000</u>	149,000
Interest receivable [(\$40,000 X 6%) X 8/12] ...		1,600
Inventories at lower of cost (determined using LIFO) or market		
Finished goods.....	52,000	
Work in process .....	34,000	
Raw materials .....	<u>207,000</u>	<u>293,000</u>
Total current assets .....		<u>\$509,600</u>

\* (\$37,000 + \$50,000). An acceptable alternative is to report cash at \$37,000 and simply report the restricted cash (plant expansion) in the investments section.

LO: 2, Bloom: AP, Difficulty: Moderate, Time: 15-20, AACSB: Analytic, AICPA BB: None, AICPA FC: Measurement, Reporting, AICPA PC: None

**EXERCISE 5.8 (10–15 minutes)**

- 1. Dividends payable of \$2,375,000 will be reported as a current liability [(1,000,000 – 50,000) X \$2.50].**
- 2. Bonds payable of \$25,000,000 and interest payable of \$3,000,000 (\$100,000,000 X 12% X 3/12) will be reported as current liabilities. Bonds payable of \$75,000,000 (\$100,000,000 - \$25,000,000) will be reported as a long-term liability.**
- 3. Customer advances of \$17,000,000 will be reported as a current liability (\$12,000,000 + \$30,000,000 – \$25,000,000).**

LO: 1, 2, Bloom: AP, Difficulty: Moderate, Time: 10-15, AACSB: Analytic, AICPA BB: None, AICPA FC: Reporting, AICPA PC: Communication

**EXERCISE 5.9 (30–35 minutes)**

(a) **Allessandro Scarlatti Company**  
**Balance Sheet (Partial)**  
**December 31, 2020**

<b>Current assets</b>		
Cash .....		\$ 34,396*
Accounts receivable .....	\$ 91,300**	
Less: Allowance for doubtful accounts .....	<u>7,000</u>	84,300
Inventory .....		159,000***
Prepaid expenses.....		<u>9,000</u>
<b>Total current assets .....</b>		<b><u>\$286,696</u></b>
*Cash balance		\$ 40,000
Add: Cash disbursement after discount (\$39,000 X .98)		<u>38,220</u>
		78,220
Less: Cash sales in January (\$30,000 – \$21,500)	\$ 8,500	
Cash collected on account	23,324	
Bank loan proceeds (\$35,324 – \$23,324)	<u>12,000</u>	<u>43,824</u>
Adjusted cash		<b><u>\$ 34,396</u></b>
**Accounts receivable balance		\$ 89,000
Add: Accounts reduced from January collection (\$23,324 ÷ .98)		<u>23,800</u>
		112,800
Deduct: Accounts receivable in January		<u>(21,500)</u>
Adjusted accounts receivable		<b><u>\$ 91,300</u></b>
***Inventory		\$171,000
Less: Inventory received on consignment		<u>12,000</u>
Adjusted inventory		<b><u>\$159,000</u></b>

**EXERCISE 5.9 (Continued)**

**Current liabilities**

Notes payable .....		<b>\$55,000<sup>a</sup></b>
Accounts payable.....		
		<b><u>115,000<sup>b</sup></u></b>
<b>Total current liabilities .....</b>		<b><u>\$170,000</u></b>

<sup>a</sup> Accounts payable balance		<b>\$ 61,000</b>
Add: Cash disbursements	<b>\$39,000</b>	
Purchase invoice omitted		
(\$27,000 – \$12,000)	<b><u>15,000</u></b>	<b><u>54,000</u></b>
Adjusted accounts payable		<b><u>\$115,000</u></b>

<sup>b</sup> Notes payable balance		<b>\$ 67,000</b>
Less: Proceeds of bank loan		<b><u>12,000</u></b>
Adjusted notes payable		<b><u>\$ 55,000</u></b>

**(b) Adjustment to retained earnings balance:**

Add: January sales discounts		
[((\$23,324 ÷ .98) X .02) .....		<b>\$ 476</b>
Deduct: January sales .....	<b>\$30,000</b>	
January purchase discounts		
(\$39,000 X .02) .....	<b>780</b>	
December purchases (\$27,000 - \$12,000)	<b>15,000</b>	
Consignment inventory .....	<b><u>12,000</u></b>	<b><u>(57,780)</u></b>
Change (decrease) to retained earnings .....		<b><u>\$(57,304)</u></b>

LO: 1, 2, , Bloom: AN, Difficulty: Complex, Time: 30-35, AACSB: Analytic, Communication, AICPA BB: None, AICPA FC: Reporting, AICPA PC: None

**EXERCISE 5.10 (15–20 minutes)**

- (a) In order for a liability to be reported for threatened litigation, the potential loss must be probable and the amount of the payment must be reasonably estimable. Since these conditions are not met, an accrual is not required.**
- (b) A current liability of \$150,000 should be recorded.**
- (c) A current liability for accrued interest of \$4,000 ( $\$600,000 \times 8\% \times 1/12$ ) should be reported. Also, the \$600,000 note payable should be a current liability if payable in one year. Otherwise, the \$600,000 notes payable would be a long-term liability.**
- (d) Bad Debt Expense of \$300,000 ( $\$10,000,000 \times .03$ ) should be debited and the Allowance for Doubtful Accounts credited for \$300,000, assuming that there is a \$0 balance in the Allowance for Doubtful Accounts. However, this does not result in a liability as Chopin does not have an obligation to expend assets. The allowance for doubtful accounts is a valuation account (contra asset) and is deducted from accounts receivable on the balance sheet so that receivables are reported at net realizable value, or the amount expected to be collected.**
- (e) A current liability of \$80,000 ( $\$2.00 \times 40,000$ ) should be reported. The liability is recorded on the date of declaration.**
- (f) Customer advances of \$110,000 ( $\$160,000 - \$50,000$ ) will be reported as a current liability.**

LO: 1, 2, Bloom: AP, Difficulty: Moderate, Time: 15-20, AACSB: Analytic, Communication, AICPA BB: None, AICPA FC: Reporting, AICPA PC: Communication

EXERCISE 5.11 (25–30 minutes)

Kelly Corporation  
Balance Sheet  
December 31, 2020

Assets

Current assets:

Cash .....	\$ 6,850 *	
Supplies .....	1,200	
Prepaid insurance .....	<u>1,000</u>	
Total current assets .....		\$ 9,050

Property, plant and equipment:

Equipment .....	48,000	
Less: Accumulated depr.—equipment .....	<u>4,000</u>	44,000

Intangible assets:

Trademarks .....		<u>950</u>
Total assets .....		<u>\$54,000</u>

Liabilities and Stockholders' Equity

Current liabilities

Accounts payable .....	\$10,000	
Salaries and wages payable .....	500	
Unearned service revenue .....	<u>2,000</u>	
Total current liabilities .....		\$12,500

Long-term liabilities

Bonds payable (due 2027) .....		<u>9,000</u>
Total liabilities .....		21,500

Stockholders' equity

Common stock .....	10,000	
Retained earnings (\$25,000 – \$2,500**) .....	<u>22,500</u>	
Total stockholders' equity .....		<u>32,500</u>
Total liabilities and stockholders' equity .....		<u>\$54,000</u>

### EXERCISE 5.11 (Continued)

\*[\$54,000 - \$950 - \$44,000 - \$1,000 - \$1,200]

\*\*[\$10,000 - (\$9,000 + \$1,400 + \$1,200 + \$900)]

LO: 2, Bloom: AP, Difficulty: Moderate, Time: 25-35, AACSB: Analytic, AICPA BB: None, AICPA FC: Reporting, AICPA PC: None

Commented [TDW1]: Fit on prior page?

EXERCISE 5.12 (30–35 minutes)

**Scott Butler Corporation  
Balance Sheet  
December 31, 2020**

<u>Assets</u>		
<u>Current assets</u>		
Cash .....	\$197,000	
Debt investments (Trading).....	153,000	
Accounts receivable .....	\$435,000	
Less: Allowance for doubtful accounts .....	(25,000)    410,000	
Inventory.....	<u>597,000</u>	
Total current assets .....		1,357,000
 <u>Long-term investments</u>		
Debt investments .....	299,000	
Equity investments .....	<u>277,000</u>	
Total long-term investments.....		576,000
 <u>Property, plant, and equipment</u>		
Land .....	260,000	
Buildings.....	1,040,000	
Less: Accum. depreciation— building .....	152,000    888,000	
Equipment .....	600,000	
Less: Accum. depreciation— equipment .....	60,000 <u>540,000</u>	
Total property, plant, and equipment .....		1,688,000
 <u>Intangible assets</u>		
Franchises .....	160,000	
Patents .....	<u>195,000</u>	
Total intangible assets.....		<u>355,000</u>
Total assets .....		<u>\$3,976,000</u>

**EXERCISE 5.12 (Continued)**

**Liabilities and Stockholders' Equity**

**Current liabilities**

Notes payable (short-term).....	\$ 90,000	
Accounts payable .....	455,000	
Dividends payable .....	136,000	
Accrued liabilities .....	<u>96,000</u>	
Total current liabilities .....		\$ 777,000

**Long-term debt**

Notes payable (long-term).....	900,000	
Bonds payable .....	<u>1,000,000</u>	
Total long-term liabilities.....		<u>1,900,000</u>
Total liabilities .....		<u>2,677,000</u>

**Stockholder's equity**

<b>Paid-in capital</b>		
Common stock (\$5 par) .....	\$1,000,000	
Additional paid-in capital.....	<u>80,000</u>	1,080,000
Retained earnings* .....		<u>410,000</u>
Total paid-in capital and retained earnings .....	1,490,000	
Less: Treasury stock .....	<u>191,000</u>	
Total stockholders' equity .....		<u>1,299,000</u>
Total liabilities and stockholders' equity .....		<u>\$3,976,000</u>

## EXERCISE 5.12 (Continued)

### \*Computation of Retained Earnings:

Sales revenue	\$8,100,000
Investment revenue	63,000
Gain	80,000
Cost of goods sold	(4,800,000)
Selling expenses	(2,000,000)
Administrative expenses	(900,000)
Interest expense	<u>(211,000)</u>
Net income	<u>\$ 332,000</u>

Beginning retained earnings	\$ 78,000
Net income	<u>332,000</u>
Ending retained earnings	<u>\$410,000</u>

Or ending retained earnings can be computed as follows:

Total stockholders' equity (\$3,976,000 - \$2,677,000)	\$1,299,000
Add: Treasury stock	191,000
Less: Paid-in capital in excess of par (\$1,000,000 + \$80,000)	<u>1,080,000</u>
Ending retained earnings	<u>\$ 410,000</u>

**Note to instructor:** There is no dividends account. Thus, the 12/31/20 retained earnings balance already reflects any dividends declared.

LO: 2, Bloom: C, Difficulty: Moderate, Time: 30-35, AACSB: AICPA BB: None, AICPA BB: None, AICPA FC: Reporting, AICPA PC: None

**EXERCISE 5.13 (15–20 minutes)**

- |        |        |        |
|--------|--------|--------|
| (a) 4. | (f) 1. | (k) 1. |
| (b) 3. | (g) 5. | (l) 2. |
| (c) 4. | (h) 4. | (m) 2. |
| (d) 3. | (i) 5. |        |
| (e) 1. | (j) 4. |        |

LO: 3, Bloom: AP, Difficulty: Moderate, Time: 15-20, AACSB: Analytic, AICPA BB: None, AICPA FC: Reporting, AICPA PC: None

**EXERCISE 5.14 (25–35 minutes)**

**Constantine Cavamanlis Inc.  
Statement of Cash Flows  
For the Year Ended December 31, 2020**

<b>Cash flows from operating activities</b>		
Net income .....		<b>\$44,000</b>
<b>Adjustments to reconcile net income to net cash provided by operating activities:</b>		
Depreciation expense .....	\$ 6,000	
Increase in accounts receivable .....	(3,000)	
Increase in accounts payable .....	<u>5,000</u>	<u>8,000</u>
Net cash provided by operating activities.....		<b>52,000</b>
<b>Cash flows from investing activities</b>		
Purchase of equipment .....		<b>(17,000)</b>
<b>Cash flows from financing activities</b>		
Issuance of common stock .....	20,000	
Payment of cash dividends.....	<u>(23,000)</u>	
Net cash used by financing activities.....		<u>(3,000)</u>
Net increase in cash .....		<b>32,000</b>
Cash at beginning of year .....		<u>13,000</u>
Cash at end of year .....		<u><b>\$45,000</b></u>

LO: 3, Bloom: AN, Difficulty: Moderate, Time: 25-35, AACSB: Analytic, AICPA BB: None, AICPA FC: Reporting, AICPA PC: None

**EXERCISE 5.15 (25–35 minutes)**

**(a) Zubin Mehta Corporation  
Statement of Cash Flows  
For the Year Ended December 31, 2020**

<b>Cash flows from operating activities</b>	
Net income.....	\$160,000
Adjustments to reconcile net income to net cash provided by operating activities:	
Depreciation expense (\$106,000 - \$89,000) ....	\$17,000
Loss on sale of investments .....	10,000
Decrease in accounts receivable .....	5,000
Decrease in current liabilities.....	<u>(17,000)</u>
Net cash provided by operating activities.....	<u>175,000</u>
<b>Cash flows from investing activities</b>	
Sale of investments .....	12,000
[(\$74,000 – \$52,000) – \$10,000]	
Purchase of equipment (\$298,000 - \$240,000).....	<u>(58,000)</u>
Net cash used by investing activities .....	(46,000)
<b>Cash flows from financing activities</b>	
Payment of cash dividends .....	<u>(30,000)</u>
Net increase in cash .....	99,000
Cash at beginning of year .....	<u>78,000</u>
Cash at end of year .....	<u>\$177,000</u>

**(b) Free Cash Flow Analysis**

Net cash provided by operating activities.....	\$175,000
Less: Purchase of equipment .....	(58,000)
Dividends .....	<u>(30,000)</u>
Free cash flow .....	<u>\$ 87,000</u>

LO: 3, 4, Bloom: AP, Difficulty: Moderate, Time: 25-35, AACSB: Analytic, AICPA BB: None, AICPA FC: Reporting, AICPA PC: None

**EXERCISE 5.16 (20–25 minutes)**

(a) **Shabbona Corporation**  
**Statement of Cash Flows**  
**For the Year Ended December 31, 2020**

<b>Cash flows from operating activities</b>		
Net income .....		<b>\$125,000</b>
<b>Adjustments to reconcile net income to net cash provided by operating activities:</b>		
Depreciation expense (\$69,000 - \$42,000) .....	<b>\$27,000</b>	
Increase in accounts receivable .....	<b>(16,000)</b>	
Decrease in inventory .....	<b>9,000</b>	
Decrease in accounts payable .....	<b>(13,000)</b>	<u><b>7,000</b></u>
Net cash provided by operating activities.....		<b>132,000</b>
<b>Cash flows from investing activities</b>		
Sale of land (\$110,000 - \$71,000) .....	<b>39,000</b>	
Purchase of equipment (\$260,000 - \$200,000) .....	<b>(60,000)</b>	
Net cash used by investing activities.....		<b>(21,000)</b>
<b>Cash flows from financing activities</b>		
Payment of cash dividends .....		<u><b>(60,000)</b></u>
Net increase in cash .....		<b>51,000</b>
Cash at beginning of year .....		<u><b>22,000</b></u>
Cash at end of year .....		<u><b>\$ 73,000</b></u>
<b>Noncash investing and financing activities</b>		
<b>Issued common stock to retire \$50,000 of bonds outstanding</b>		

## EXERCISE 5.16 (Continued)

(b) Current cash debt coverage =

$$\begin{aligned} &= \frac{\text{Net cash provided by operating activities}}{\text{Average current liabilities}} \\ &= \frac{\$132,000}{(\$34,000 + \$47,000) / 2} \\ &= 3.26 \text{ to } 1 \end{aligned}$$

Cash debt coverage =

$$\begin{aligned} &= \frac{\text{Net cash provided by operating activities}}{\text{Average total liabilities}} \\ &= \$132,000 \div \frac{\$184,000 + \$247,000}{2} \\ &= .61 \text{ to } 1 \end{aligned}$$

### Free Cash Flow Analysis

Net cash provided by operating activities.....	\$132,000
Less: Purchase of equipment .....	(60,000)
Dividends .....	<u>(60,000)</u>
Free cash flow .....	<u>\$ 12,000</u>

Shabbona has excellent liquidity. Its financial flexibility is good. It might be noted that it substantially reduced its long-term debt in 2020, which improved its financial flexibility.

LO: 3, 4, Bloom: AP, Difficulty: Moderate, Time: 25-35, AACSB: Analytic, AICPA BB: None, AICPA FC: Reporting, AICPA PC: None

**EXERCISE 5.17 (30–35 minutes)**

**(a) Grant Wood Corporation  
Statement of Cash Flows  
For the Year Ended December 31, 2020**

<b>Cash flows from operating activities</b>	
Net income .....	\$55,000
Adjustments to reconcile net income to net cash provided by operating activities:	
Loss on sale of equipment .....	\$ 2,000*
Depreciation expense (\$9,000 + \$4,000) .....	13,000
Patent amortization .....	2,500
Increase in current assets (other than cash) ....	(29,000)
Increase in current liabilities .....	<u>13,000</u>
Net cash provided by operating activities.....	<u>56,500</u>
<b>Cash flows from investing activities</b>	
Sale of equipment .....	10,000
Addition to building .....	(27,000)
Investment in stock.....	<u>(16,000)</u>
Net cash used by investing activities.....	(33,000)
<b>Cash flows from financing activities</b>	
Issuance of bonds.....	50,000
Payment of dividends .....	(30,000)
Purchase of treasury stock .....	<u>(11,000)</u>
Net cash provided by financing activities .....	<u>9,000</u>
Net increase in cash .....	32,500 <sup>a</sup>
Cash at the beginning of the year ...	<u>82,000</u>
Cash at the end of the year	<u>\$114,500</u>

\*[\$10,000 – (\$20,000 – \$8,000)]

<sup>a</sup>An additional proof to arrive at the increase in cash is provided as follows:

Total current assets—end of period	\$296,500 [from part (b)]
Total current assets—beginning of period	<u>235,000</u>
Increase in current assets during the period	61,500
Increase in current assets other than cash	<u>29,000</u>
Increase in cash during year	<u>\$ 32,500</u>

EXERCISE 5.17 (Continued)

(b)	<b>Grant Wood Corporation</b> <b>Balance Sheet</b> <b>December 31, 2020</b>
<b>Assets</b>	
Current assets .....	\$296,500 <sup>b</sup>
Equity investments (Long-term) .....	16,000
Property, plant, and equipment	
Land .....	\$ 30,000
Building (\$120,000 + \$27,000).....	\$147,000
Less: Accum. depreciation—building (\$30,000 + \$4,000).....	(34,000) 113,000
Equipment (\$90,000 – \$20,000).....	70,000
Less: Accum. depreciation—equipment (\$11,000 – \$8,000 + \$9,000).....	(12,000) 58,000
Total property, plant, and equipment.....	201,000
Intangible assets—patents	
(\$40,000 – \$2,500).....	37,500
Total assets .....	<u>\$551,000</u>
<b>Liabilities and Stockholders' Equity</b>	
Current liabilities (\$150,000 + \$13,000).....	\$163,000
Long-term liabilities	
Bonds payable (\$100,000 + \$50,000).....	150,000
Total liabilities .....	313,000
Stockholders' equity	
Common stock .....	\$180,000
Retained earnings (\$44,000 + \$55,000 – \$30,000) ....	69,000
Total paid-in capital and retained earnings....	249,000
Less: Cost of treasury stock .....	11,000
Total stockholders' equity .....	238,000
Total liabilities and stockholders' equity.....	<u>\$551,000</u>

<sup>b</sup> The amount determined for current assets could be computed last and then is a “plug” figure. That is, total liabilities and stockholders’ equity is computed because information is available to determine this amount. Because the total assets amount is the same as total liabilities and stockholders’ equity amount, the amount of total assets is determined. Information is available to compute all the asset amounts except current assets and therefore current assets can be determined by deducting the total of all the other asset balances from the total asset balance (i.e., \$551,000 – \$37,500 – \$201,000 – \$16,000). Another way to compute this amount, given the information, is that beginning current assets plus the \$29,000 increase in current assets other than cash plus the \$32,500 increase in cash equals \$296,500.

LO: 2, 3, Bloom: AP, Difficulty: Moderate, Time: 30-35, AACSB: Analytic, AICPA BB: None, AICPA FC: Reporting, AICPA PC: None

**EXERCISE 5.18 (25–35 minutes)**

**(a) Madrasah Corporation  
Statement of Cash Flows  
For the Year Ended December 31, 2020**

<b>Cash flows from operating activities</b>		
Net income .....		\$44,000
Adjustment to reconcile net income to net cash provided by operating activities:		
Depreciation expense .....	\$ 6,000	
Increase in accounts payable .....	5,000	
Increase in accounts receivable .....	<u>(18,000)</u>	<u>(7,000)</u>
Net cash provided by operating activities.....		37,000
<b>Cash flows from Investing activities</b>		
Purchase of equipment .....		(17,000)
<b>Cash flows from financing activities</b>		
Issuance of stock.....	20,000	
Payment of dividends .....	<u>(33,000)</u>	
Net cash used by financing activities.....		<u>(13,000)</u>
Net increase in cash .....		7,000
Cash at beginning of year .....		<u>13,000</u>
Cash at end of year .....		<u>\$20,000</u>

	<u>2020</u>	<u>2019</u>
<b>(b) Current ratio</b>	6.3	6.73
	<u>(\$20,000 + \$126,000)</u>	<u>(\$13,000 + \$88,000)</u>
	\$ 20,000	\$ 15,000

**Free Cash Flow Analysis**

Net cash provided by operating activities .....	\$ 37,000
Less: Purchase of equipment .....	(17,000)
Pay dividends.....	<u>(33,000)</u>
Free cash flow .....	<u>\$ (13,000)</u>

**(c) Although Madrasah’s current ratio has declined from 2019 to 2020, it is still in excess of 6. It appears the company has good liquidity and financial flexibility, even though it has a negative free cash flow.**

LO: 3, 4, Bloom: AP, Difficulty: Moderate, Time: 25-35, AACSB: Analytic, AICPA BB: None, AICPA FC: Reporting, AICPA PC: None

## SOLUTIONS TO PROBLEMS

**PROBLEM 5.1**

**COMPANY NAME**  
**Balance Sheet**  
**December 31, 20XX**

### Assets

#### Current assets

Cash on hand (including petty cash).....	\$XXX		
Cash in bank.....	<u>XXX</u>	\$XXX	
Debt investments (trading).....		XXX	
Accounts receivable .....	XXX		
Less: Allowance for doubtful accounts .....	<u>XXX</u>	XXX	
Interest receivable.....		XXX	
Advances to employees .....		XXX	
Inventory .....		XXX	
Prepaid rent .....		<u>XXX</u>	
Total current assets .....			\$XXX

**Commented [GV2]:** The two cash accounts are typically combined on a balance sheet rather than being reported separately.

#### Long-term investments

Bond sinking fund.....		XXX	
Cash surrender value of life insurance .....		XXX	
Land for future plant site .....		<u>XXX</u>	
Total long-term investments .....			XXX

#### Property, plant, and equipment

Land .....		XXX	
Buildings.....	XXX		
Less: Accum. depreciation—buildings ....	<u>XXX</u>	XXX	
Equipment .....	XXX		
Less: Accum. depreciation—equipment...	<u>XXX</u>	<u>XXX</u>	
Total property, plant, and equipment.....			XXX

#### Intangible assets

Copyrights .....		XXX	
Patents .....		<u>XXX</u>	
Total intangible assets.....			<u>XXX</u>
Total assets .....			<u>\$XXX</u>

PROBLEM 5.1 (Continued)

Liabilities and Stockholders' Equity

Current liabilities

Notes payable.....	\$XXX	
Payroll taxes payable.....	XXX	
Salaries and wages payable.....	XXX	
Dividends payable .....	XXX	
Unearned subscriptions revenue.....	<u>XXX</u>	
<b>Total current liabilities .....</b>		<b>\$XXX</b>

Long-term debt

Bonds payable .....	\$XXX	
Add: Premium on bonds payable.....	<u>XXX</u>	XXX
Pension liability.....	<u>XXX</u>	
<b>Total long-term liabilities.....</b>		<b><u>XXX</u></b>
<b>Total liabilities .....</b>		<b><u>XXX</u></b>

Stockholders' equity

<u>Capital stock</u>		
Preferred stock (description) .....	XXX	
Common stock (description).....	<u>XXX</u>	XXX
Paid-in capital in excess of par –		
Preferred stock .....	<u>XXX</u>	
<b>Total paid-in capital .....</b>		<b><u>XXX</u></b>
Retained earnings.....	<u>XXX</u>	
<b>Total paid-in capital and     retained earnings .....</b>		<b>XXX</b>
Accumulated other comprehensive income .....	XXX	
Less: Treasury stock .....	<u>XXX</u>	
<b>Equity attributable to Company .....</b>		<b>XXX</b>
 <b>Equity attributable to noncontrolling interest.....</b>		
		<b>XXX</b>
<b>Total stockholders' equity .....</b>		<b><u>XXX</u></b>
<b>Total liabilities and     stockholders' equity .....</b>		<b><u>XXX</u></b>

LO: 2, Bloom: AN, Difficulty: Moderate, Time: 30-35, AACSB: Analytic, AICPA BB: None, AICPA FC: Reporting, AICPA PC: None

PROBLEM 5.2

**MONTOYA, INC.**  
**Balance Sheet**  
**December 31, 2020**

Assets

Current assets

Cash .....	\$	360,000	
Debt investments (trading) .....		121,000	
Notes receivable .....		445,700	
Income taxes receivable .....		97,630	
Inventory .....		239,800	
Prepaid expenses .....		87,920	
Total current assets .....			\$1,352,050

Property, plant, and equipment

Land .....		480,000	
Buildings .....	\$1,640,000		
Less: Accum. depreciation— buildings .....	270,200	1,369,800	
Equipment .....	1,470,000		
Less: Accum. depreciation— equipment .....	292,000	1,178,000	3,027,800

Intangible assets

Goodwill .....		125,000	
Total assets .....		\$4,504,850	

PROBLEM 5.2 (Continued)

Liabilities and Stockholders' Equity

Current liabilities

Notes payable.....	\$	265,000	
Accounts payable .....		490,000	
Payroll taxes payable.....		177,591	
Income taxes payable .....		98,362	
Rent payable.....		<u>45,000</u>	
Total current liabilities .....			\$1,075,953

Long-term liabilities

Notes payable (long-term).....		1,600,000	
Bonds payable .....	\$300,000		
Less: Discount on bonds payable .....	<u>15,000</u>	285,000	
Rent payable (long-term).....		<u>480,000</u>	<u>2,365,000</u>
Total liabilities .....			3,440,953

Stockholders' equity

<u>Capital stock</u>			
Preferred stock, \$10 par; 20,000 shares authorized, 15,000 shares issued .....	150,000		
Common stock, \$1 par; 400,000 shares authorized, 200,000 issued.....	<u>200,000</u>	350,000	
Retained earnings (\$1,063,897 – \$350,000).....		<u>713,897</u>	
Total stockholders' equity (\$4,504,850 – \$3,440,953).....			<u>1,063,897</u>
Total liabilities and stockholders' equity .....			<u>\$4,504,850</u>

LO: 2, Bloom: AP, Difficulty: Moderate, Time: 35-40, AACSB: Analytic, AICPA BB: None, AICPA FC: Reporting, AICPA PC: None

**PROBLEM 5.3**

**EASTWOOD COMPANY  
Balance Sheet  
December 31, 2020**

**Assets**

**Current assets**

Cash .....		\$ 41,000	
Accounts receivable .....	\$163,500		
Less: Allowance for doubtful accounts .....	8,700	154,800	
Inventory (LIFO) .....		208,500	
Prepaid insurance .....		5,900	
<b>Total current assets .....</b>			<b>\$ 410,200</b>

**Long-term investments**

Equity investments (\$120,000 have been pledged as security for notes payable)— at fair value .....			339,000
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**Property, plant, and equipment**

Land .....		85,000	
Construction in process (building).....		124,000	
Equipment .....	400,000		
Less: Accum. depreciation— equipt. ....	240,000	160,000	369,000

**Intangible assets**

Patents (less \$4,000 amortization) ....		36,000	
<b>Total assets .....</b>			<b><u>\$1,154,200</u></b>

**PROBLEM 5.3 (Continued)**

**Liabilities and Stockholders' Equity**

**Current liabilities**

Notes payable (secured by investments of \$120,000).....	\$ 94,000	
Accounts payable .....	148,000	
Accrued liabilities .....	<u>49,200</u>	
Total current liabilities .....		\$ 291,200

**Long-term liabilities**

8% Bonds payable, due January 1, 2031 .....	200,000	
Less: Discount on bonds payable ....	<u>20,000</u>	<u>180,000</u>
Total liabilities .....		471,200

**Stockholders' equity**

<b>Common stock</b>		
Authorized 600,000 shares of \$1 par value; issued and outstanding, 500,000 shares .....	\$500,000	
Paid in capital in excess of par—common stock.....	<u>45,000</u>	545,000
Retained earnings .....	<u>138,000</u>	<u>683,000</u>
Total liabilities and stockholders' equity .....		<u>\$1,154,200</u>

LO: 2, Bloom: AP, Difficulty: Moderate, Time: 40-45, AACSB: Analytic, AICPA BB: None, AICPA FC: Reporting, AICPA PC: None

**PROBLEM 5.4**

**KISHWAUKEE CORPORATION**  
**Balance Sheet**  
**December 31, 2020**

**Assets**

**Current assets**

Cash .....	\$175,900	
Accounts receivable .....	170,000	
Inventory .....	<u>312,100</u>	
<b>Total current assets .....</b>		<b>\$ 658,000</b>

**Long-term investments**

Assets allocated to trustee for expansion:		
Cash in bank.....	70,000	
Debt investments (held-to-maturity).....	<u>138,000</u>	208,000

**Property, plant, and equipment**

Land .....	950,000	
Buildings.....	\$1,070,000 <sup>a</sup>	
Less: Accum. depreciation— buildings.....	<u>410,000</u>	<u>660,000</u>
<b>Total assets .....</b>		<b><u>\$2,476,000</u></b>

**Liabilities and Stockholders' Equity**

**Current liabilities**

Notes payable—current installment..	\$100,000	
Income taxes payable .....	<u>75,000</u>	
<b>Total current liabilities .....</b>		<b>\$ 175,000</b>

**PROBLEM 5.4 (Continued)**

**Long-term liabilities**

Notes payable (\$600,000 - \$100,000).....	<u>500,000<sup>b</sup></u>
Total liabilities .....	<b>675,000</b>

**Stockholders' equity**

Common stock, no par; 1,000,000 shares authorized and issued; 950,000 <sup>d</sup> shares outstanding .....	1,150,000	
Retained earnings .....	<u>683,000<sup>c</sup></u>	
	<b>1,833,000</b>	
Less: Treasury stock, at cost (50,000 shares) .....	<u>87,000</u>	
Equity attributable to Kishwaukee .....	1,746,000	
Equity attributable to noncontrolling interest .....	<u>55,000</u>	
Total stockholders' equity .....		<u>1,801,000</u>
Total liabilities and stockholders' equity .....		<u><b>\$2,476,000</b></u>

<sup>a</sup>\$1,640,000 – \$570,000 (to eliminate the excess of appraisal value over cost from the Buildings account. Note that the appreciation capital account is also deleted).

<sup>b</sup>\$600,000 – \$100,000 (to reclassify the currently maturing portion of the notes payable as a current liability).

<sup>c</sup>\$803,000 – \$120,000 (to remove the value of goodwill from retained earnings. Note 2 indicates that retained earnings was credited. Note that the goodwill account is also deleted).

<sup>d</sup>1,000,000 shares issued – 50,000 Treasury shares

**Note:** As an alternate presentation, the cash restricted for plant expansion would be added to the general cash account and then subtracted. The amount reported in the investments section would not change.

LO: 2, Bloom: AP, Difficulty: Complex, Time: 40-45, AACSB: Analytic, AICPA BB: None, AICPA FC: Reporting, AICPA PC: None

PROBLEM 5.5

**SARGENT CORPORATION**  
**Balance Sheet**  
**December 31, 2020**

**Assets**

**Current assets**

Cash .....		\$150,000	
Equity investments (at fair value) ....		80,000	
Accounts receivable .....	\$ 170,000		
Less: Allowance for doubtful accounts .....	<u>10,000</u>	160,000	
Inventory (lower-of-FIFO cost - or-net realizable value) .....		<u>180,000</u>	
<b>Total current assets .....</b>			<b>\$ 570,000</b>

**Long-term investments**

Equity investments (at fair value).....		270,000	
Bond sinking fund.....		250,000	
Cash surrender value of life insurance .....		40,000	
Land held for future use .....		<u>270,000</u>	830,000

**Property, plant, and equipment**

Land .....		500,000	
Buildings.....	1,040,000		
Less: Accum. depreciation—buildings.....	<u>360,000</u>	680,000	
Equipment .....	450,000		
Less: Accum. depreciation—equipment.....	<u>180,000</u>	<u>270,000</u>	1,450,000

**Intangible assets**

Franchise .....		165,000	
Goodwill.....		<u>100,000</u>	<u>265,000</u>
<b>Total assets .....</b>			<b><u>\$3,115,000</u></b>

**PROBLEM 5.5 (Continued)**

**Liabilities and Stockholders' Equity**

**Current liabilities**

Notes payable.....	\$ 80,000	
Accounts payable .....	140,000	
Income taxes payable .....	40,000	
Unearned rent revenue .....	<u>5,000</u>	
Total current liabilities .....		\$ 265,000

**Long-term liabilities**

Notes payable.....		120,000
Bonds payable, due 2028 .....	\$1,000,000	
Less: Discount on bonds payable ..	<u>40,000</u>	<u>960,000</u>
Total liabilities .....		<u>1,080,000</u>
		1,345,000

**Stockholders' equity**

<b>Capital stock</b>		
Preferred stock, no par value; 200,000 shares authorized, 70,000 issued and outstanding ...	450,000	
Common stock, \$1 par value; 400,000 shares authorized, 100,000 issued and outstanding .	100,000	
Paid-in capital in excess of par— common stock [100,000 X (\$10.00 – \$1.00)].....	<u>900,000</u>	1,450,000
Retained earnings.....		<u>320,000</u>
Total stockholders' equity .....		<u>1,770,000</u>
Total liabilities and stockholders' equity .....		<u>\$3,115,000</u>

LO: 2, Bloom: AN, Difficulty: Complex, Time: 40-45, AACSB: Analytic, AICPA BB: None, AICPA FC: Reporting, AICPA PC: None

**PROBLEM 5.6**

(a) **LANSBURY INC.**  
**Statement of Cash Flows**  
**For the Year Ended December 31, 2020**

<b>Cash flows from operating activities</b>		
Net income.....		<b>\$32,000</b>
Adjustments to reconcile net income to net cash provided by operating activities		
Depreciation expense .....	\$ 11,000	
Gain on sale of investments.....	(3,400)	
Increase in account receivable		
(\$41,600 – \$21,200).....	<u>(20,400)</u>	<u>(12,800)</u>
Net cash provided by operating activities.....		<b>19,200</b>
<b>Cash flows from investing activities</b>		
Sale of investments .....	15,000	
Purchase of land .....	<u>(13,000)</u>	
Net cash provided by investing activities .....		<b>2,000</b>
<b>Cash flows from financing activities</b>		
Issuance of common stock .....	20,000	
Retirement of notes payable .....	(16,000)	
Payment of cash dividends .....	<u>(8,200)</u>	
Net cash used by financing activities.....		<u>(4,200)</u>
Net increase in cash .....		<b>17,000</b>
Cash at beginning of year .....		<u>20,000</u>
Cash at end of year .....		<u><b>\$37,000</b></u>
<b>Noncash investing and financing activities</b>		
Land purchased through issuance of \$35,000 of bonds		

**PROBLEM 5.6 (Continued)**

(b)

**LANSBURY INC.  
Balance Sheet  
December 31, 2020**

<u>Assets</u>		<u>Liabilities and Stockholders' Equity</u>	
Cash	\$37,000	Accounts payable	\$30,000
Accounts receivable	41,600	Notes payable (long-term)	25,000 (4)
Debt investments	20,400 (1)	Bonds payable	35,000 (5)
Plant assets (net)	70,000 (2)	Common stock	120,000 (6)
Land	88,000 (3)	Retained earnings	<u>47,000 (7)</u>
	<u>\$257,000</u>		<u>\$257,000</u>

(1)  $\$32,000 - (\$15,000 - \$3,400)$

(2)  $\$81,000 - \$11,000$

(3)  $\$40,000 + \$13,000 + \$35,000$

(4)  $\$41,000 - \$16,000$

(5)  $\$0 + \$35,000$

(6)  $\$100,000 + \$20,000$

(7)  $\$23,200 + \$32,000 - \$8,200$

(c) Cash flow information is useful for assessing the amount, timing, and uncertainty of future cash flows. For example, by showing the specific inflows and outflows from operating activities, investing activities, and financing activities, the user has a better understanding of the liquidity and financial flexibility of the enterprise. Similarly, these reports are useful in providing feedback about the flow of enterprise resources. This information should help users make more accurate predictions of future cash flows. In addition, some individuals have expressed concern about the quality of the earnings because the measurement of the income depends on a number of accruals and estimates which may be somewhat subjective. As a result, the higher the ratio of cash provided by operating activities to net income, the more comfort some users have in the reliability of the earnings. In this problem, the ratio of cash provided by operating activities to net income is 52% ( $\$19,200 \div \$37,000$ ).

**PROBLEM 5.6 (Continued)**

An analysis of Lansbury's free cash flow indicates it is negative as shown below:

**Free Cash Flow Analysis**

---

Net cash provided by operating activities.....	\$19,200
Less: Purchase of land.....	13,000
Dividends .....	<u>8,200</u>
Free cash flow .....	<u>\$ (2,000)</u>

Its current cash debt coverage is 0.64 to 1  $\frac{\$19,200}{\$30,000}$  and its cash debt coverage is 0.24 to 1  $\frac{\$19,200}{\frac{\$71,000 + \$90,000}{2}}$ , which are reasonable. Overall, it appears that its liquidity position is average and overall financial flexibility and solvency should be improved.

LO: 2, 3, 4, Bloom: AP, Difficulty: Complex, Time: 35-45, AACSB: Analytic, Communication, AICPA BB: None, AICPA FC: Reporting, AICPA PC: Communication

PROBLEM 5.7

(a) **AERO INC.**  
**Statement of Cash Flows**  
**For the Year Ended December 31, 2020**

<b>Cash flows from operating activities</b>		
Net income .....		<b>\$35,000</b>
Adjustments to reconcile net income to net cash provided by operating activities		
Depreciation expense .....	\$12,000	
Loss on sale of investments .....	5,000	
Increase in accounts payable (\$40,000 – \$30,000) .....	10,000	
Increase in accounts receivable (\$42,000 – \$21,200) .....	<u>(20,800)</u>	<u>6,200</u>
Net cash provided by operating activities.....		<b>41,200</b>
<b>Cash flows from investing activities</b>		
Sale of debt investments (\$32,000 - \$5,000)....	27,000	
Purchase of land .....	<u>(38,000)</u>	
Net cash used by investing activities .....		<b>(11,000)</b>
<b>Cash flows from financing activities</b>		
Issuance of common stock .....	30,000	
Payment of cash dividends .....	<u>(10,000)</u>	
Net cash provided by financing activities .....		<u><b>20,000</b></u>
Net increase in cash .....		<b>50,200</b>
Cash at beginning of year .....		<u>20,000</u>
Cash at end of year .....		<u><b>\$70,200</b></u>
<b>Noncash investing and financing activities</b>		
Land purchased through issuance of \$30,000 of bonds		

**PROBLEM 5.7 (Continued)**

(b) **AERO INC.**  
**Balance Sheet**  
**December 31, 2020**

<u>Assets</u>		<u>Liabilities and Stockholders' Equity</u>	
Cash	\$ 70,200	Accounts payable	\$ 40,000
Accounts receivable	42,000	Bonds payable	71,000 (3)
Plant assets (net)	69,000 (1)	Common stock	130,000 (4)
Land	<u>108,000 (2)</u>	Retained earnings	<u>48,200 (5)</u>
	<u>\$289,200</u>		<u>\$289,200</u>

- (1) \$81,000 – \$12,000
- (2) \$40,000 + \$38,000 + \$30,000
- (3) \$41,000 + \$30,000
- (4) \$100,000 + \$30,000
- (5) \$23,200 + \$35,000 – \$10,000

(c) An analysis of Aero's free cash flow indicates it is negative as shown below:

**Free Cash Flow Analysis**

Net cash provided by operating activities.....	\$41,200
Less: Purchase of land.....	38,000
Dividends .....	<u>10,000</u>
Free cash flow .....	<u>\$ (6,800)</u>

**PROBLEM 5.7 (Continued)**

Its current cash debt coverage is 1.18 to 1  $\frac{\$41,200}{\$35,000}$  \*. Overall, it appears that its liquidity position is average and overall financial flexibility should be improved.

$$*(\$30,000 + \$40,000) \div 2$$

- (d) This type of information is useful for assessing the amount, timing, and uncertainty of future cash flows. For example, by showing the specific inflows and outflows from operating activities, investing activities, and financing activities, the user has a better understanding of the liquidity and financial flexibility of the enterprise. Similarly, these reports are useful in providing feedback about the flow of enterprise resources. This information should help users make more accurate predictions of future cash flow. In addition, some individuals have expressed concern about the quality of the earnings because the measurement of the income depends on a number of accruals and estimates which may be somewhat subjective. As a result, the higher the ratio of cash provided by operating activities to net income, the more comfort some users have in the reliability of the earnings.

LO: 2, 3, 4, Bloom: AP, Difficulty: Complex, Time: 40-50, AACSB: Analytic, Communication, AICPA BB: None, AICPA FC: Reporting, AICPA PC: Communication

## TIME AND PURPOSE OF CONCEPTS FOR ANALYSIS

**CA 5.1** (Time 20–25 minutes)

Purpose—to provide a varied number of financial transactions and then determine how each of these items should be reported in the financial statements. Accounting changes, additional assessments of income taxes, prior period adjustments, and changes in estimates are some of the financial transactions presented.

**CA 5.2** (Time 30–35 minutes)

Purpose—to present the asset section of a partial balance sheet that must be analyzed to assess its deficiencies. Items such as improper classifications, terminology, and disclosure must be considered.

**CA 5.3** (Time 20–25 minutes)

Purpose—to present a balance sheet that must be analyzed to assess its deficiencies. Items such as improper classification, terminology, and disclosure must be considered.

**CA 5.4** (Time 20–25 minutes)

Purpose—to present the student an ethical issue related to the presentation of balance sheet information. The reporting involves “net presentation” of property, plant, and equipment.

**CA 5.5** (Time 40–50 minutes)

Purpose—to present a cash flow statement that must be analyzed to explain differences in cash flow and net income, and sources and uses of cash flow and ways to improve cash flow.

## SOLUTIONS TO CONCEPTS FOR ANALYSIS

### CA 5.1

1. The new estimate would be used in computing depreciation expense for 2020. No adjustment of the balance in accumulated depreciation at the beginning of the year would be made. Instead, the remaining depreciable cost would be divided by the estimated remaining life. This is a change in an estimate and is accounted for prospectively (in the current and future years). Disclosure in the notes to the financial statements is appropriate if material.
2. The additional assessment should be shown on the current period's income statement. If material it should be shown separately; if immaterial it could be included with the current year's tax expense. This transaction does not represent a prior period adjustment.
3. The effect of the error at December 31, 2019, should be shown as an adjustment of the beginning balance of retained earnings on the retained earnings statement. The current year's expense should be adjusted (if necessary) for the possible carryforward of the error into the 2020 expense computation.
4. Generally, an entry is made for a cash dividend on the date of declaration. The appropriate entry would be a debit to Retained Earnings (or Dividends) for the amount to be paid, with a corresponding credit to Dividends Payable. Dividends Payable is reported as a current liability.

LO: 2, Bloom: AP, Difficulty: Moderate, Time: 20-25, AACSB: Analytic, Communication, AICPA BB: None, AICPA FC: Reporting, AICPA PC: Communication

### CA 5.2

1. Unclaimed payroll checks should be shown as a current liability if these are claims by employees.
2. Debt investments (trading) should be reported at fair value, not cost.
3. Bad Debt Reserve is an improper terminology; Allowance for Doubtful Accounts is considered more appropriate. The amount of estimated uncollectible accounts should be disclosed.
4. Next-in, First-out (NIFO) is not an acceptable inventory valuation method.
5. Heading "Tangible assets" should be changed to "Property, Plant, and Equipment"; also label for corresponding \$630,000 should be changed to "net property, plant, and equipment."
6. Land should not be depreciated.
7. Buildings and equipment and their related accumulated depreciation balances should be separately disclosed.
8. The valuation basis for stocks should be disclosed (fair value or equity) and the description should be Debt investment (Available-for-Sale) or Equity investment in X Company. The Long-term investments section should precede Property, plant, and equipment.
9. Treasury stock is not an asset and should be shown in the stockholders' equity section as a deduction.
10. Discount on bonds payable is not an asset and should be shown as a deduction from bonds payable.
11. Sinking fund should be reported in the long-term investments section.

LO: 1, 2, Bloom: AN, Difficulty: Moderate, Time: 20-25, AACSB: Analytic, Communication, AICPA BB: None, AICPA FC: Reporting, AICPA PC: Communication

## CA 5.3

Criticisms of the balance sheet of the Sameed Brothers Corporation:

1. The basis for the valuation of marketable securities should be shown. Marketable securities are valued at fair value. In addition, they should be classified as either debt or equity and as either debt trading securities, debt available-for-sale securities, or debt held-to-maturity securities.
2. An allowance for doubtful accounts receivable is not indicated.
3. The basis for the valuation and the method of pricing for Inventory are not indicated.
4. A stock investment in a subsidiary company is not ordinarily held to be sold within one year or the operating cycle, whichever is longer. As such, this account should not be classified as a current asset, but rather should be included under the heading "Investments." The basis of valuation of the investment should be shown.
5. Treasury stock is not an asset. It should be presented as a deduction in the shareholders' equity section of the balance sheet. The class of stock, number of shares, and basis of valuation should be indicated.
6. Buildings and land should be segregated. The Reserve for Depreciation should be shown as a subtraction from the Buildings account only. Also, the term "reserve for" should be replaced by "accumulated."
7. Cash Surrender Value of Life Insurance would be more appropriately shown under the heading of "Investments."
8. Reserve for Income Taxes should appropriately be entitled Income Tax Payable.
9. Customers' Accounts with Credit Balances is an immaterial amount. As such, this account need not be shown separately. The \$1,000 credit could readily be netted against Accounts Receivable without any material misstatement.
10. Unamortized Premium on Bonds Payable should be appropriately shown as an addition to the related Bonds Payable in the long-term liability section. The use of the term deferred credits is inappropriate.
11. Bonds Payable is inadequately disclosed. The interest rate, interest payment dates, and maturity date should be indicated.
12. Additional disclosure relative to the Common Stock account is needed. This disclosure should include the number of shares authorized, issued, and outstanding.
13. Earned Surplus should appropriately be entitled Retained Earnings. Also, a separate heading should be shown for this account; it should not be shown under the heading "Common Stock." A more appropriate heading would be "Shareholders' or Stockholders' Equity."
14. Cash Dividends Declared should be disclosed on the retained earnings statement as a reduction of retained earnings. Dividends Payable, in the amount of \$8,000, should be shown on the balance sheet among the current liabilities, assuming payment has not occurred.

LO: 1, 2, Bloom: AN, Difficulty: Simple, Time: 20-25, AACSB: Analytic, Communication, AICPA BB: None, AICPA FC: Measurement, Reporting, AICPA PC: Communication

## CA 5.4

- (a). The ethical issues involved are integrity and honesty in financial reporting, full disclosure, transparency, and the accountant's professionalism.
- (b). While presenting property, plant, and equipment net of depreciation on the balance sheet may be acceptable under GAAP, it is inappropriate to attempt to hide information from financial statement users. Information must be useful, and the presentation Keene is considering would not be. Users would not grasp the age of plant assets and the company's need to concentrate its future cash outflows on replacement of these assets. This information could be provided in a note disclosure.

Because of the significant impact on the financial statements of the depreciation method(s) used, the following disclosures should be made.

- a. Depreciation expense for the period.
- b. Balances of major classes of depreciable assets, by nature and function.
- c. Accumulated depreciation, either by major classes of depreciable assets or in total.
- d. A general description of the method or methods used in computing depreciation with respect to major classes of depreciable assets.

LO: 2, Bloom: AN, Difficulty: Simple, Time: 20-25, AACSB: Ethics, Communication, Professional Demeanor, AICPA FC: Reporting, AICPA PC: Communication

## CA 5.5

Date

President Kappeler, CEO  
Kappeler Corporation  
125 Wall Street  
Middleton, Kansas 67458

Dear Mr. Kappeler:

I have good news and bad news about the financial statements for the year ended December 31, 2020. The good news is that net income of \$100,000 is close to what we predicted in the strategic plan last year, indicating strong performance this year. The bad news is that the cash balance is seriously low. Enclosed is the Statement of Cash Flows, which best illustrates how these situations occurred simultaneously.

If you look at the operating activities, you can see that no cash was generated by operations due to the increase in accounts receivable and inventory and reduction in accounts payable. In effect, these events caused net cash flow provided by operating activities to be lower than net income; they reduced your cash balance by \$116,000.

The corporation made significant investments in equipment and land. These were paid from cash reserves. These purchases used 75% of the company's cash. In addition, the redemption of the bonds improved the equity of the corporation and reduced interest expense. However, it also used 25% of the corporation's cash. It is normal to use cash for investing and financing activities. But when cash is used, it must also be replenished.

Operations normally provide the cash for investing and financing activities. Since there is a finite amount of assets to sell and funds to borrow or raise from the sale of capital stock, operating activities are the only renewable source of cash. That is why it is important to keep the operating cash flows positive. Cash management requires careful and continuous planning.

## CA 5.5 (Continued)

There are several possible remedies for the current cash problem. First, prepare a detailed analysis of monthly cash requirements for the next year. Second, investigate the changes in accounts receivable and inventory and work to return them to more normal levels. Third, look for more favorable terms with suppliers to allow the accounts payable to increase without loss of discounts or other costs. Finally, since the land represents a long-term commitment without immediate plans for use, consider shopping for a low interest loan to finance the acquisition for a few years and return the cash balance to a more normal level.

If you have additional questions or need one of our staff to address this problem, please contact me at your convenience.

Sincerely yours,

Partner in Charge

LO: 3, 4, Bloom: AN, Difficulty: Complex, Time: 40-50, AACSB: Analytic, Communication, AICPA BB: None, AICPA FC: Reporting, AICPA PC: Communication