

## CHAPTER 2

Note: The letter A or B indicated for a question, exercise, or problem means that the question, exercise, or problem relates to a chapter appendix.

### ANSWERS TO QUESTIONS

1. At the acquisition date, the information available (and through the end of the measurement period) is used to estimate the expected total consideration at fair value. If the subsequent stock issue valuation differs from this assessment, the Exposure Draft (SFAS 1204-001) expected to replace FASB Statement No. 141 specifies that equity should not be adjusted. The reason is that the valuation was determined at the date of the exchange, and thus the impact on the firm's equity was measured at that point based on the best information available then.
  2. Pro forma financial statements (sometimes referred to as "as if" statements) are financial statements that are prepared to show the effect of planned or contemplated transactions.
  3. For purposes of the goodwill impairment test, all goodwill must be assigned to a reporting unit. Goodwill impairment for each reporting unit should be tested in a two-step process. In the first step, the fair value of a reporting unit is compared to its carrying amount (goodwill included) at the date of the periodic review. The fair value of the unit may be based on quoted market prices, prices of comparable businesses, or a present value or other valuation technique. If the fair value at the review date is less than the carrying amount, then the second step is necessary. In the second step, the carrying value of the goodwill is compared to its implied fair value. (The calculation of the implied fair value of goodwill used in the impairment test is similar to the method illustrated throughout this chapter for valuing the goodwill at the date of the combination.)
  4. The expected increase was due to the elimination of goodwill amortization expense. However, the impairment loss under the new rules was potentially larger than a periodic amortization charge, and this is in fact what materialized within the first year after adoption (a large impairment loss). If there was any initial stock price impact from elimination of goodwill amortization, it was only a short-term or momentum effect. Another issue is how the stock market responds to the goodwill impairment charge. Some users claim that this charge is a non-cash charge and should be disregarded by the market. However, others argue that the charge is an admission that the price paid was too high, and might result in a stock price decline (unless the market had already adjusted for this overpayment prior to the actual writedown).
- 5B. The acquisition method treats a combination as the acquisition of one or more companies by another. The pooling of interests method, in contrast, interprets a business combination as the process of two or more groups of stockholders uniting ownership interest by an exchange of equity securities. This method (pooling) is no longer allowed for acquisitions after June 30, 2001. However, accounts resulting from previous acquisitions that used the pooling method will continue to be carried forward under the valuations implied by that method.

Under the acquisition method the identifiable assets acquired and liabilities assumed are recorded at their fair values at the date of acquisition. Any excess of total implied value over the sum of these fair values is recorded as goodwill. Under the pooling method fair values of assets and

liabilities were ignored, and the assets acquired and liabilities assumed were carried forward to the new or surviving entity at their recorded (book) values.

Financial statement differences resulted from the use of one method rather than the other. The purchase method normally results in higher asset values. To the extent that these higher values relate to depreciable assets and inventories, future income charges are greater. (Also, bond discounts, under the purchase method, must be amortized to future periods, and in the past goodwill was amortized under the purchase method.) Thus, the use of the pooling method generally resulted in greater future earnings, lower asset values, and greater returns on assets.

6B. Net income would be the highest under the pooling method (no excess depreciation or goodwill amortization), lowest under the former purchase rules (before FASB Statement No. 141, both excess depreciation and goodwill amortization), and intermediate under the purchase rules after FASB Statement No. 141 (excess depreciation only). Assets would be higher under the purchase method, either old or new rules. In fact, under the new rules, total assets will remain higher than under the old purchase rules because goodwill, once recorded, is not amortized.

## **Business Ethics Solutions**

Business ethics solutions are merely suggestions of points to address. The objective is to raise the students' awareness of the topics, and to invite discussion. In most cases, there is clear room for disagreement or conflicting viewpoints.

The board has responsibility to look into anything that might suggest malfeasance or inappropriate conduct. Such incidents might suggest broader problems with integrity, honesty, and judgment. In other words, can you trust any reports from the CEO? If the CEO is not fired, does this send a message to other employees that ethical lapses are okay? Employees might feel that top executives are treated differently.

## **ANSWERS TO EXERCISES**

### **Exercise 2-1**

|               |                                      |         |           |
|---------------|--------------------------------------|---------|-----------|
| <b>Part A</b> | Receivables                          | 228,000 |           |
|               | Inventory                            | 396,000 |           |
|               | Plant and Equipment                  | 540,000 |           |
|               | Land                                 | 660,000 |           |
|               | Goodwill (\$2,154,000 - \$1,824,000) | 330,000 |           |
|               | Liabilities                          |         | 594,000   |
|               | Cash                                 |         | 1,560,000 |

|               |  |         |         |
|---------------|--|---------|---------|
| <b>Part B</b> | Receivables  | 228,000 |         |
|               | Inventory  | 396,000 |         |
|               | Plant and Equipment                                    | 540,000 |         |
|               | Land   | 660,000 |         |
|               | Liabilities  |         | 594,000 |
|               | Cash   |         | 990,000 |
|               | Gain on Business Combination (\$1,230,000 - \$990,000) |         | 240,000 |

**Exercise 2-2**

|  |                    |
|--|--------------------|
| Cash   | \$680,000          |
| Receivables  | 720,000            |
| Inventories  | 2,240,000          |
| Plant and Equipment (net) (\$3,840,000 + \$720,000)      | 4,560,000          |
| Goodwill   | <u>120,000</u>     |
| Total Assets   | <u>\$8,320,000</u> |
| <br>   |                    |
| Liabilities  | 1,520,000          |
| Common Stock, \$16 par (\$3,440,000 + (.50 × \$800,000)) | 3,840,000          |
| Other Contributed Capital (\$400,000 + \$800,000)        | 1,200,000          |
| Retained Earnings  | <u>1,760,000</u>   |
| Total Equities   | <u>\$8,320,000</u> |

Entries on Petrello Company's books would be:

|  |         |
|--|---------|
| Cash   | 200,000 |
| Receivables                                      | 240,000 |
| Inventory  | 240,000 |
| Plant and Equipment                              | 720,000 |
| Goodwill *                                       | 120,000 |
| Liabilities                                      | 320,000 |
| Common Stock (25,000 × \$16)                     | 400,000 |
| Other Contributed Capital (\$48 - \$16) × 25,000 | 800,000 |

$$\begin{aligned} & * (\$48 \times 25,000) - [(\$1,480,000 - (\$800,000 - \$720,000) - \$320,000)] \\ & = \$1,200,000 - [\$1,480,000 - \$80,000 - \$320,000] = \$1,200,000 - \$1,080,000 = \$120,000 \end{aligned}$$

### Exercise 2-3

|  |           |                  |
|--|-----------|------------------|
| Accounts Receivable  | 231,000   |                  |
| Inventory  | 330,000   |                  |
| Land   | 550,000   |                  |
| Buildings and Equipment  | 1,144,000 |                  |
| Goodwill   | 848,000   |                  |
| Allowance for Uncollectible Accounts (\$231,000 - \$198,000)                             |           | 33,000           |
| Current Liabilities  |           | 275,000          |
| Bonds Payable  |           | 450,000          |
| Premium on Bonds Payable (\$495,000 - \$450,000)   |           | 45,000           |
| Preferred Stock (15,000 × \$100)   |           | 1,500,000        |
| Common Stock (30,000 × \$10)   |           | 300,000          |
| Other Contributed Capital (\$25 - \$10) × 30,000   |           | 450,000          |
| Cash   |           | 50,000           |
| Cost paid (\$1,500,000 + \$750,000 + \$50,000) =   |           | \$2,300,000      |
| Fair value of net assets (198,000 + 330,000 + 550,000 + 1,144,000 – 275,000 – 495,000) = |           | <u>1,452,000</u> |
| Goodwill =   |           | <u>\$848,000</u> |

### Exercise 2-4

|                            |         |         |
|----------------------------|---------|---------|
| Cash                       | 96,000  |         |
| Receivables                | 55,200  |         |
| Inventory                  | 126,000 |         |
| Land                       | 198,000 |         |
| Plant and Equipment        | 466,800 |         |
| Goodwill*                  | 137,450 |         |
| Accounts Payable           |         | 44,400  |
| Bonds Payable              |         | 480,000 |
| Premium on Bonds Payable** |         | 45,050  |
| Cash                       |         | 510,000 |

|  |                             |                  |
|--|-----------------------------|------------------|
| ** Present value of maturity value, 12 periods @ 4%: | $0.6246 \times \$480,000 =$ | \$299,808        |
| Present value of interest annuity, 12 periods @ 4%:  | $9.38507 \times \$24,000 =$ | <u>225,242</u>   |
| Total present value                                  |                             | 525,050          |
| Par value  |                             | <u>480,000</u>   |
| Premium on bonds payable                             |                             | <u>\$ 45,050</u> |

|  |               |                  |
|--|---------------|------------------|
| *Cash paid   |               | \$510,000        |
| Less: Book value of net assets acquired (\$897,600 – \$44,400 – \$480,000) |               | <u>(373,200)</u> |
| Excess of cash paid over book value  |               | 136,800          |
| Increase in inventory to fair value  | (15,600)      |                  |
| Increase in land to fair value   | (28,800)      |                  |
| Increase in bond to fair value   | <u>45,050</u> |                  |
| Total increase in net assets to fair value                                 |               | <u>650</u>       |
| Goodwill   |               | <u>\$137,450</u> |

### Exercise 2-5

|  |           |           |
|--|-----------|-----------|
| Current Assets                         | 960,000   |           |
| Plant and Equipment                    | 1,440,000 |           |
| Goodwill                               | 336,000   |           |
| Liabilities                            |           | 216,000   |
| Cash                                   |           | 2,160,000 |
| Liability for Contingent Consideration |           | 360,000   |

### Exercise 2-6

The amount of the contingency is \$500,000 (10,000 shares at \$50 per share)

|  |         |         |
|--|---------|---------|
| <b>Part A</b> Goodwill                                     | 500,000 |         |
| Paid-in-Capital for Contingent Consideration               |         | 500,000 |
| <b>Part B</b> Paid-in-Capital for Contingent Consideration | 500,000 |         |
| Common Stock (\$10 par)                                    |         | 100,000 |
| Paid-In-Capital in Excess of Par                           |         | 400,000 |

Platz Company does not adjust the original amount recorded as equity.

### Exercise 2-7

|                          |         |
|--------------------------|---------|
| Current Assets           | \$3,000 |
| Plant Assets (1)         | 24,350  |
| Goodwill (2)             | 23,400  |
| Debt                     | 50,000  |
| Stockholders' Equity (3) | 750     |

(1)  $\$12,000 + [.95 \times (\$25,000 - \$12,000)] =$  \$24,350

(2) Cost of shares \$50,000  
Book value of net assets acquired  $(.95 \times \$15,000)$  14,250  
Excess of cost over book value 35,750  
Assigned to plant assets  $[.95 \times (\$25,000 - \$12,000)]$  12,350  
Assigned to goodwill \$23,400

(3)  $.05 \times \$15,000 =$  750

### **Exercise 2-8**

|   |                  |
|---|------------------|
| 1. (c) Cost (8,000 shares @ \$30)                                   | \$240,000        |
| Fair value of net assets acquired                                   | <u>228,800</u>   |
| Excess of cost over fair value (goodwill)                           | <u>\$ 11,200</u> |
| 2. (c) Cost (8,000 shares @ \$30)                                   | \$240,000        |
| Fair value of net assets acquired (\$90,000 + \$242,000 – \$56,000) | <u>276,000</u>   |
| Excess of fair value over cost (gain)                               | <u>\$ 36,000</u> |

### **Exercise 2-9**

|  |           |           |
|--|-----------|-----------|
| Current Assets   | 362,000   |           |
| Long-term Assets (\$1,890,000 + \$20,000) + (\$98,000 + \$5,000) | 2,013,000 |           |
| Goodwill *   | 395,000   |           |
| Liabilities  |           | 119,000   |
| Long-term Debt   |           | 491,000   |
| Common Stock (144,000 × \$5)                                     |           | 720,000   |
| Other Contributed Capital (144,000 × (\$15 - \$5))               |           | 1,440,000 |

$$* (144,000 \times \$15) - [\$362,000 + \$2,013,000 - (\$119,000 + \$491,000)] = \$395,000$$

$$\text{Total shares issued} \left( \frac{\$700,000}{\$5} + \frac{\$20,000}{\$5} \right) = 144,000$$

$$\text{Fair value of stock issued} (144,000 \times \$15) = \$2,160,000$$

### **Exercise 2-10**

#### **Case A**

|                                |                |
|--------------------------------|----------------|
| Cost (Purchase Price)          | \$130,000      |
| Less: Fair Value of Net Assets | <u>120,000</u> |
| Goodwill                       | \$ 10,000      |

#### **Case B**

|                                |               |
|--------------------------------|---------------|
| Cost (Purchase Price)          | \$110,000     |
| Less: Fair Value of Net Assets | <u>90,000</u> |
| Goodwill                       | \$ 20,000     |

#### **Case C**

|                                |               |
|--------------------------------|---------------|
| Cost (Purchase Price)          | \$15,000      |
| Less: Fair Value of Net Assets | <u>20,000</u> |
| Gain                           | (\$ 5,000)    |

**Exercise 2-10 (Continued)**

|        | Assets   |                |                   | Liabilities | Retained Earnings (Gain) |
|--------|----------|----------------|-------------------|-------------|--------------------------|
|        | Goodwill | Current Assets | Long-Lived Assets |             |                          |
| Case A | \$10,000 | \$20,000       | \$130,000         | \$30,000    | 0                        |
| Case B | 20,000   | 30,000         | 80,000            | 20,000      | 0                        |
| Case C | 0        | 20,000         | 40,000            | 40,000      | 5,000                    |

**Exercise 2-11****Part A.**

|   |                |
|---|----------------|
| 2008: <b>Step 1:</b> Fair value of the reporting unit | \$400,000      |
| <u>Carrying value of unit:</u>                        |                |
| Carrying value of identifiable net assets             | \$330,000      |
| Carrying value of goodwill (\$450,000 - \$375,000)    | <u>75,000</u>  |
|   | <u>405,000</u> |
| Excess of carrying value over fair value              | \$ 5,000       |

The excess of carrying value over fair value means that step 2 is required.

|  |                |
|--|----------------|
| <b>Step 2:</b> Fair value of the reporting unit    | \$400,000      |
| Fair value of identifiable net assets              | <u>340,000</u> |
| Implied value of goodwill                          | 60,000         |
| Recorded value of goodwill (\$450,000 - \$375,000) | <u>75,000</u>  |
| Impairment loss                                    | \$ 15,000      |

|   |                  |
|---|------------------|
| 2009: <b>Step 1:</b> Fair value of the reporting unit | \$400,000        |
| <u>Carrying value of unit:</u>                        |                  |
| Carrying value of identifiable net assets             | \$320,000        |
| Carrying value of goodwill (\$75,000 - \$15,000)      | <u>60,000</u>    |
|   | <u>380,000</u>   |
| Excess of fair value over carrying value              | <u>\$ 20,000</u> |

The excess of fair value over carrying value means that step 2 is **not** required.

|   |                  |
|---|------------------|
| 2010: <b>Step 1:</b> Fair value of the reporting unit | \$350,000        |
| <u>Carrying value of unit:</u>                        |                  |
| Carrying value of identifiable net assets             | \$300,000        |
| Carrying value of goodwill (\$75,000 - \$15,000)      | <u>60,000</u>    |
|   | <u>360,000</u>   |
| Excess of carrying value over fair value              | <u>\$ 10,000</u> |

The excess of carrying value over fair value means that step 2 is required.

### Exercise 2-11 (Continued)

|  |                  |
|--|------------------|
| <b>Step 2:</b> Fair value of the reporting unit  | \$350,000        |
| Fair value of identifiable net assets            | <u>325,000</u>   |
| Implied value of goodwill                        | 25,000           |
| Recorded value of goodwill (\$75,000 - \$15,000) | <u>60,000</u>    |
| Impairment loss                                  | <u>\$ 35,000</u> |

### Part B.

|       |                          |        |        |
|-------|--------------------------|--------|--------|
| 2008: | Impairment Loss—Goodwill | 15,000 |        |
|       | Goodwill                 |        | 15,000 |
| 2009: | No entry                 |        |        |
| 2010: | Impairment Loss—Goodwill | 35,000 |        |
|       | Goodwill                 |        | 35,000 |

### Part C.

*SFAS No. 142* specifies the presentation of goodwill in the balance sheet and income statement (if impairment occurs) as follows:

- The aggregate amount of goodwill should be a separate line item in the balance sheet.
- The aggregate amount of losses from goodwill impairment should be shown as a separate line item in the operating section of the income statement unless some of the impairment is associated with a discontinued operation (in which case it is shown net-of-tax in the discontinued operation section).

### Part D.

In a period in which an impairment loss occurs, *SFAS No. 142* mandates the following disclosures in the notes:

- (1) A description of the facts and circumstances leading to the impairment;
- (2) The amount of the impairment loss and the method of determining the fair value of the reporting unit;
- (3) The nature and amounts of any adjustments made to impairment estimates from earlier periods, if significant.

### Exercise 2-12

|  |               |
|--|---------------|
| a. Fair Value of Identifiable Net Assets         |               |
| Book values \$500,000 – \$100,000 =              | \$400,000     |
| Write up of Inventory and Equipment:             |               |
| (\$20,000 + \$30,000) =                          | <u>50,000</u> |
| Purchase price above which goodwill would result | \$450,000     |

- Equipment would not be written down, regardless of the purchase price, unless it was reviewed and determined to be overvalued originally.
- A gain would be shown if the purchase price was below \$450,000.
- Anything below \$450,000 is technically considered a bargain.
- Goodwill would be \$50,000 at a purchase price of \$500,000 or (\$450,000 + \$50,000).

### Exercise 2-13A

|                                      |         |         |
|--------------------------------------|---------|---------|
| Cash                                 | 20,000  |         |
| Accounts Receivable                  | 112,000 |         |
| Inventory                            | 134,000 |         |
| Land                                 | 55,000  |         |
| Plant Assets                         | 463,000 |         |
| Discount on Bonds Payable            | 20,000  |         |
| Goodwill*                            | 127,200 |         |
| Allowance for Uncollectible Accounts |         | 10,000  |
| Accounts Payable                     |         | 54,000  |
| Bonds Payable                        |         | 200,000 |
| Deferred Income Tax Liability        |         | 67,200  |
| Cash                                 |         | 600,000 |

|   |           |                  |
|---|-----------|------------------|
| Cost of acquisition   |           | \$600,000        |
| Book value of net assets acquired (\$80,000 + \$132,000 + \$160,000)                      |           | <u>372,000</u>   |
| Difference between cost and book value  |           | 228,000          |
| Allocated to:   |           |                  |
| Increase inventory, land, and plant assets to fair value (\$52,000 + \$25,000 + \$71,000) | (148,000) |                  |
| Decrease bonds payable to fair value  | (20,000)  |                  |
| Establish deferred income tax liability (\$168,000 × 40%)                                 |           | <u>67,200</u>    |
| Balance assigned to goodwill  |           | <u>\$127,200</u> |

### Exercise 2-14B

|   | Pooling           | Purchase(old*)    | Purchase (new)    |
|---|-------------------|-------------------|-------------------|
| Revenues                                    | \$300,000         | \$300,000         | \$300,000         |
| Expenses                                    | <u>(120,000)</u>  | <u>(120,000)</u>  | <u>(120,000)</u>  |
| Income before depreciation and amortization | 180,000           | 180,000           | 180,000           |
| Depreciation – equipment                    | (6,000)           | (12,000)          | (12,000)          |
| Depreciation - building                     | (5,000)           | (12,500)          | (12,500)          |
| Amortization of goodwill                    |                   | <u>(1,000)</u>    | <u>-0-</u>        |
| Income before taxes                         | \$ <u>169,000</u> | \$ <u>154,500</u> | \$ <u>155,500</u> |

\* “Old” refers to the period when goodwill was amortized for reporting purposes, i.e., before FASB Statement No. 141.

#### Depreciation and amortization expense

|           |                            |  |
|-----------|----------------------------|--|
| Equipment | \$60,000/10 yr = \$6,000   | \$120,000/10 yrs = \$12,000                  |
| Building  | \$100,000/20 yrs = \$5,000 | \$250,000/20 yrs = \$12,500                  |
| Goodwill* |                            | (\$40,000)/40 = \$1,000 only under old rules |

|                          |                |                          |
|--------------------------|----------------|--------------------------|
| * Cost                   | \$445,000      |                          |
| Fair value of net assets | <u>405,000</u> | = (\$435,000 – \$30,000) |
| Goodwill                 | \$ 40,000      |                          |

### ANSWERS TO PROBLEMS

**Problem 2-1**

|  |         |         |
|--|---------|---------|
| Current Assets   | 85,000  |         |
| Plant and Equipment  | 150,000 |         |
| Goodwill*  | 100,000 |         |
| Liabilities  |         | 35,000  |
| Common Stock [(20,000 shares @ \$10/share)]                  |         | 200,000 |
| Other Contributed Capital [(20,000 × (\$15 – \$10))]         |         | 100,000 |
| Acquisition Costs Expense                                    | 20,000  |         |
| Cash   |         | 20,000  |
| Other Contributed Capital                                    | 6,000   |         |
| Cash   |         | 6,000   |
| To record the direct acquisition costs and stock issue costs |         |         |

\* Goodwill = Excess of Consideration of \$335,000 (stock valued at \$300,000 plus debt assumed of \$35,000) over Fair Value of Identifiable Assets of \$235,000 (total assets of \$225,000 plus PPE fair value adjustment of \$10,000)

**Problem 2-2**

Acme Company  
Balance Sheet  
October 1, 2008  
(000)

**Part A.**

|  |              |                 |
|--|--------------|-----------------|
| Assets (except goodwill) (\$3,900 + \$9,000 + \$1,300) |              | \$14,200        |
| Goodwill (1)   |              | <u>1,160</u>    |
| Total Assets   |              | <u>\$15,360</u> |
| Liabilities (\$2,030 + \$2,200 + \$260)                |              | \$4,490         |
| Common Stock (180 × \$20) + \$2,000                    |              | 5,600           |
| Other Contributed Capital (180 × (\$50 – \$20))        |              | 5,400           |
| Retained Earnings                                      |              | <u>(130)</u>    |
| Total Liabilities and Equity                           |              | <u>\$15,360</u> |
| (1) Cost (180 × \$50)                                  |              | \$9,000         |
| Fair value of net assets acquired:                     |              |                 |
| Fair value of assets of Baltic and Colt                | \$10,300     |                 |
| Less liabilities assumed                               | <u>2,460</u> | <u>7,840</u>    |
| Goodwill   |              | <u>\$1,160</u>  |

**Problem 2-2 (continued)**

**Part B.**

**Baltic**

|   |                 |             |
|---|-----------------|-------------|
| 2009: <b>Step 1:</b> Fair value of the reporting unit |                 | \$6,500,000 |
| <u>Carrying value of unit:</u>                        |                 |             |
| Carrying value of identifiable net assets             | 6,340,000       |             |
| Carrying value of goodwill                            | <u>200,000*</u> |             |
| Total carrying value                                  |                 | 6,540,000   |

\*[(140,000 x \$50) – (\$9,000,000 – \$2,200,000)]

The excess of carrying value over fair value means that step 2 is required.

|   |  |                  |
|---|--|------------------|
| <b>Step 2:</b> Fair value of the reporting unit |  | \$6,500,000      |
| Fair value of identifiable net assets           |  | <u>6,350,000</u> |
| Implied value of goodwill                       |  | 150,000          |
| Recorded value of goodwill                      |  | <u>200,000</u>   |
| Impairment loss                                 |  | \$ 50,000        |

(because \$150,000 < \$200,000)

**Colt**

|   |                 |             |
|---|-----------------|-------------|
| 2009: <b>Step 1:</b> Fair value of the reporting unit |                 | \$1,900,000 |
| <u>Carrying value of unit:</u>                        |                 |             |
| Carrying value of identifiable net assets             | \$1,200,000     |             |
| Carrying value of goodwill                            | <u>960,000*</u> |             |
| Total carrying value                                  |                 | 2,160,000   |

\*[(40,000 x \$50) – (\$1,300,000 – \$260,000)]

The excess of carrying value over fair value means that step 2 is required.

|   |  |                  |
|---|--|------------------|
| <b>Step 2:</b> Fair value of the reporting unit |  | \$1,900,000      |
| Fair value of identifiable net assets           |  | <u>1,000,000</u> |
| Implied value of goodwill                       |  | 900,000          |
| Recorded value of goodwill                      |  | <u>960,000</u>   |
| Impairment loss                                 |  | \$ 60,000        |

(because \$900,000 < \$960,000)

Total impairment loss is \$110,000.

Journal entry:

|                 |           |
|-----------------|-----------|
| Impairment Loss | \$110,000 |
| Goodwill        | \$110,000 |

**Problem 2-3**

|  |                        |
|--|------------------------|
| Present value of maturity value, 20 periods @ 6%: $0.3118 \times \$600,000 =$    | \$187,080              |
| Present value of interest annuity, 20 periods @ 6%: $11.46992 \times \$30,000 =$ | <u>344,098</u>         |
| Total Present value  | 531,178                |
| Par value  | <u>600,000</u>         |
| Discount on bonds payable  | <u><u>\$68,822</u></u> |

|                                       |         |         |
|---------------------------------------|---------|---------|
| Cash                                  | 114,000 |         |
| Accounts Receivable                   | 135,000 |         |
| Inventory                             | 310,000 |         |
| Land                                  | 315,000 |         |
| Buildings                             | 54,900  |         |
| Equipment                             | 39,450  |         |
| Bond Discount (\$40,000 + \$68,822)   | 108,822 |         |
| Current Liabilities                   |         | 95,300  |
| Bonds Payable (\$300,000 + \$600,000) |         | 900,000 |
| Gain on Purchase of Business          |         | 81,872  |

**Computation of Excess of Net Assets Received Over Cost**

|  |                           |
|--|---------------------------|
| Cost (Purchase Price) (\$531,178 plus liabilities assumed of \$95,300 and \$260,000) | \$886,478                 |
| Less: Total fair value of assets received  | <u>\$968,350</u>          |
| Excess of fair value of net assets over cost   | <u><u>(\$ 81,872)</u></u> |

**Problem 2-4****Part A** January 1, 2008

|  |         |         |
|--|---------|---------|
| Accounts Receivable                    | 72,000  |         |
| Inventory                              | 99,000  |         |
| Land                                   | 162,000 |         |
| Buildings                              | 450,000 |         |
| Equipment                              | 288,000 |         |
| Goodwill*                              | 54,000  |         |
| Allowance for Uncollectible Accounts   |         | 7,000   |
| Accounts Payable                       |         | 83,000  |
| Note Payable                           |         | 180,000 |
| Cash                                   |         | 720,000 |
| Liability for Contingent Consideration |         | 135,000 |

**\*Computation of Goodwill**

|   |                         |
|---|-------------------------|
| Cash paid (\$720,000 + \$135,000)                                 | \$855,000               |
| Total fair value of net assets acquired (\$1,064,000 - \$263,000) | <u>801,000</u>          |
| Goodwill  | <u><u>\$ 54,000</u></u> |

**Problem 2-4 (continued)**

**Part B** January 2, 2010

|  |         |         |
|--|---------|---------|
| Liability for Contingent Consideration | 135,000 |         |
| Cash                                   |         | 135,000 |

**Part C** January 2, 2010

|  |         |         |
|--|---------|---------|
| Liability for Contingent Consideration | 135,000 |         |
| Income from Change in Estimate         |         | 135,000 |

**Problem 2-5**

**Part A**

|   |        |        |
|---|--------|--------|
| Investment in Park Company (5% of book value) | 2,000  |        |
| Common Stock                                  |        | 2,000  |
| Cash  | 90,000 |        |
| Notes Payable                                 |        | 90,000 |
| Investment in Park Company                    | 80,000 |        |
| Cash  |        | 80,000 |
| Current Assets                                | 12,000 |        |
| Plant Assets (1)                              | 68,250 |        |
| Goodwill (2)                                  | 8,750  |        |
| Liabilities                                   |        | 7,000  |
| Investment in Park                            |        | 82,000 |

(1)  $\$35,000 + .95 \times (\$70,000 - \$35,000) =$  \$68,250

(2) Cost of shares \$80,000  
Book value of net assets  $(.95 \times \$40,000) =$  38,000  
Difference between cost and book value \$ 42,000  
Allocated to:  
    Plant assets  $(.95 \times (\$70,000 - \$35,000)) =$  33,250  
    Goodwill \$ 8,750

**Problem 2-5 (continued)****Part B**

Step Company  
Balance Sheet  
January 1, 2007

|  |                  |
|--|------------------|
| Current Assets (\$12,000 + \$10,000)       | \$22,000         |
| Plant Assets (\$35,000 + \$33,250)         | 68,250           |
| Goodwill                                   | <u>8,750</u>     |
| Total Assets                               | <u>\$ 99,000</u> |
| Liabilities                                | \$7,000          |
| Note Payable                               | 90,000           |
| Common Stock                               | <u>2,000</u>     |
| Total Liabilities and Stockholders' Equity | <u>\$ 99,000</u> |

**Problem 2-6**

Pepper Company  
Pro Forma Balance Sheet  
Giving Effect to Proposed Issue of Common Stock and Note Payable for  
All of the Common Stock of Salt Company under Purchase Accounting  
December 31, 2007

|                              | Audited<br>Balance Sheet | Adjustments             | Pro Forma<br>Balance Sheet |
|------------------------------|--------------------------|-------------------------|----------------------------|
| Cash                         | \$180,000                | 405,000                 | \$585,000                  |
| Receivables                  | 230,000                  | (60,000) }<br>117,000 } | 287,000                    |
| Inventories                  | 231,400                  | 134,000                 | 365,400                    |
| Plant Assets                 | 1,236,500                | 905,000 (1)             | 2,141,500                  |
| Goodwill                     | <u>          </u>        | 181,500                 | <u>181,500</u>             |
| Total Assets                 | <u>\$1,877,900</u>       |                         | <u>\$3,560,400</u>         |
| Accounts Payable             | \$255,900                | (60,000) }<br>180,000 } | \$375,900                  |
| Notes Payable, 8%            | 0                        | 300,000                 | 300,000                    |
| Mortgage Payable             | 180,000                  | 152,500                 | 332,500                    |
| Common Stock, \$20 par       | 900,000                  | 600,000                 | 1,500,000                  |
| Additional Paid-in Capital   | 270,000                  | 510,000 (2)             | 780,000                    |
| Retained Earnings            | <u>272,000</u>           |                         | <u>272,000</u>             |
| Total Liabilities and Equity | <u>\$1,877,900</u>       |                         | <u>\$3,560,400</u>         |

### Problem 2-6 (continued)

#### Change in Cash

|  |                   |
|--|-------------------|
| Cash from stock issue ( $\$37 \times 30,000$ ) | \$1,110,000       |
| Less: Cash paid for acquisition                | (800,000)         |
| Plus: Cash acquired in acquisition             | <u>95,000</u>     |
| Total change in cash                           | <u>\$ 405,000</u> |

#### Goodwill:

|   |                   |
|---|-------------------|
| Cost of acquisition   | \$1,100,000       |
| Net assets acquired ( $\$340,000 + \$179,500 + \$184,000$ ) | <u>703,500</u>    |
| Excess cost over net assets acquired                        | \$396,500         |
| Assigned to plant assets                                    | <u>215,000</u>    |
| Goodwill  | <u>\$ 181,500</u> |

(1)  $\$690,000 + \$215,000$       (2)  $(\$37 - \$20) \times 30,000$

### Problem 2-7

Ping Company  
Pro Forma Income Statement for the Year 2008  
Assuming a Merger of Ping Company and Spalding Company

|                      |                  |                    |
|----------------------|------------------|--------------------|
| Sales (1)            |                  | \$6,345,972        |
| Cost of goods sold:  |                  |                    |
| Fixed Costs (2)      | \$824,706        |                    |
| Variable Costs (3)   | <u>2,464,095</u> | <u>3,288,801</u>   |
| Gross Margin         |                  | 3,057,171          |
| Selling Expenses (4) | \$785,910        |                    |
| Other Expenses (5)   | <u>319,310</u>   | <u>1,105,220</u>   |
| Net Income           |                  | <u>\$1,951,951</u> |

$$\frac{\$1,951,951 - (\$952,640 + \$499,900)}{0.20} = \frac{\$499,411}{0.20} = \$2,497,055$$

Since \$2,497,055 is greater than \$1,800,000 Ping should buy Spalding.

$$(1) \$3,510,100 + \$2,365,800 = \$5,875,900 \times 1.2 \times .9 = \$6,345,972$$

$$(2) (\$1,752,360 \times .30) + (\$1,423,800 \times .30 \times .70) = \$824,706$$

$$(3) \$1,752,360 \times .70 \times \frac{\$5,875,900 \times 1.2}{\$3,510,100} = \$2,464,095$$

$$(4) (\$632,500 + \$292,100) \times .85 = \$785,910$$

$$(5) \$172,600 \times 1.85 = \$319,310$$

**Problem 2-8A**

|               |   |         |         |
|---------------|---|---------|---------|
| <b>Part A</b> | Receivables                               | 125,000 |         |
|               | Inventory                                 | 195,000 |         |
|               | Land                                      | 120,000 |         |
|               | Plant Assets                              | 567,000 |         |
|               | Patents                                   | 200,000 |         |
|               | Deferred Tax Asset (\$60,000 x 35%)       | 21,000  |         |
|               | Goodwill*                                 | 154,775 |         |
|               | Current Liabilities                       |         | 89,500  |
|               | Bonds Payable                             |         | 300,000 |
|               | Premium on Bonds Payable                  |         | 60,000  |
|               | Deferred Tax Liability                    |         | 93,275  |
|               | Common Stock (30,000 x \$2)               |         | 60,000  |
|               | Other Contributed Capital (30,000 x \$26) |         | 780,000 |

|   |                  |
|---|------------------|
| Cost of acquisition (30,000 x \$28)                                   | \$840,000        |
| Book value of net assets acquired (\$120,000 + \$164,000 + \$267,000) | <u>551,000</u>   |
| Difference between cost and book value                                | 289,000          |
| Allocated to:   |                  |
| Increase inventory, land, plant assets, and patents to fair value     | (266,500)        |
| Deferred income tax liability (35% x \$266,500)                       | 93,275           |
| Increase bonds payable to fair value                                  | 60,000           |
| Deferred income tax asset (35% x \$60,000)                            | <u>(21,000)</u>  |
| Balance assigned to goodwill  | <u>\$154,775</u> |

|               |  |         |
|---------------|--|---------|
| <b>Part B</b> | Income Tax Expense (Balancing amount)    | 148,006 |
|               | Deferred Tax Liability (\$51,125 x 35%)* | 17,894  |
|               | Deferred Tax Asset (\$6,000 x 35%)       | 2,100   |
|               | Income Tax Payable (\$468,000 x 35%)     | 163,800 |

|                                      |                 |
|--------------------------------------|-----------------|
| * Inventory:                         | \$28,000        |
| Plant Assets, $\frac{\$100,000}{10}$ | 10,000          |
| Patents, $\frac{\$105,000}{8}$       | <u>13,125</u>   |
| Total                                | <u>\$51,125</u> |