CHAPTER 2

Note: The letter A 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. 141R* 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).

ANSWERS TO BUSINESS ETHICS CASE

a and b. 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

Part A	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
Part 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	120,000
Total Assets	$8,320,000
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	1,760,000
Total Equities	$8,320,000

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

* ($48 × 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

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) =	1,452,000
Goodwill =	$848,000

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 × $480,000 =	$299,808
Present value of interest annuity, 12 periods @ 4%:	9.38507 × $24,000 =	225,242
Total present value		525,050
Par value		480,000
Premium on bonds payable		$ 45,050

*Cash paid		$510,000
Less: Book value of net assets acquired ($897,600 – $44,400 – $480,000)		(373,200)
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	45,050	
Total increase in net assets to fair value		650
Goodwill		$137,450

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)

Part A	Goodwill	500,000	
	Paid-in-Capital for Contingent Consideration		500,000
Part 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

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

Exercise 2-8

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

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

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

Exercise 2-9

Case A

Cost (Purchase Price)	\$130,000
Less: Fair Value of Net Assets	120,000
Goodwill	\$ 10,000

Case B

Cost (Purchase Price)	\$110,000
Less: Fair Value of Net Assets	90,000
Goodwill	\$ 20,000

Case C

Cost (Purchase Price)	\$15,000
Less: Fair Value of Net Assets	20,000
Gain	(\$ 5,000)

	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 2-10

Part A.

2011: **Step 1**:	Fair value of the reporting unit		$400,000
	Carrying value of unit:		
	Carrying value of identifiable net assets	$330,000	
	Carrying value of goodwill ($450,000 - $375,000)	75,000	
			405,000
	Excess of carrying value over fair value		$ 5,000

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

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

2012: **Step 1**:	Fair value of the reporting unit		$400,000
	Carrying value of unit:		
	Carrying value of identifiable net assets	$320,000	
	Carrying value of goodwill ($75,000 - $15,000)	60,000	
			380,000
	Excess of fair value over carrying value		$ 20,000

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

2013: **Step 1**:	Fair value of the reporting unit		$350,000
	Carrying value of unit:		
	Carrying value of identifiable net assets	$300,000	
	Carrying value of goodwill ($75,000 - $15,000)	60,000	
			360,000
	Excess of carrying value over fair value		$ 10,000

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

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

Part B.

2011:	Impairment Loss—Goodwill	15,000	
	Goodwill		15,000
2012:	No entry		
2013:	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 2-11

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) =	50,000
Purchase price above which goodwill would result	$450,000

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

Exercise 2-12A

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)	372,000
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%)	67,200
Balance assigned to goodwill	$127,200

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, 2011
(000)

Part A.

Assets (except goodwill) ($3,900 + $9,000 + $1,300)		$14,200
Goodwill (1)		1,160
Total Assets		$15,360
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		(130)
Total Liabilities and Equity		$15,360
(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	2,460	7,840
Goodwill		$1,160

Problem 2-2 (continued)

Part B.

Baltic

2012: **Step1**: Fair value of the reporting unit			$6,500,000
Carrying value of unit:			
Carrying value of identifiable net assets	6,340,000		
Carrying value of goodwill	200,000*		
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.

Step 2: Fair value of the reporting unit	$6,500,000
Fair value of identifiable net assets	6,350,000
Implied value of goodwill	150,000
Recorded value of goodwill	200,000
Impairment loss	$ 50,000

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

Colt

2012: **Step1**: Fair value of the reporting unit			$1,900,000
Carrying value of unit:			
Carrying value of identifiable net assets	$1,200,000		
Carrying value of goodwill	960,000*		
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.

Step 2: Fair value of the reporting unit	$1,900,000
Fair value of identifiable net assets	1,000,000
Implied value of goodwill	900,000
Recorded value of goodwill	960,000
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%:	$11.46992 \times \$30{,}000 =$	344,098
Total Present value		531,178
Par value		600,000
Discount on bonds payable		$68,822

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	$968,350
Excess of fair value of net assets over cost	($ 81,872)

Problem 2-4

Part A January 1, 2011

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)	801,000
Goodwill	$ 54,000

Problem 2-4 (continued)

Part B January 2, 2013

Liability for Contingent Consideration	135,000	
Cash		135,000

Part C January 2, 2013

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

Problem 2-5

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, 2010

	Audited Balance Sheet	Adjustments	Pro Forma Balance Sheet
Cash	$180,000	405,000	$585,000
Receivables	230,000	(60,000)	287,000
		117,000	
Inventories	231,400	134,000	365,400
Plant Assets	1,236,500	905,000 (1)	2,141,500
Goodwill		181,500	181,500
Total Assets	$1,877,900		$3,560,400
Accounts Payable	$255,900	(60,000)	$375,900
		180,000	
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	272,000		272,000
Total Liabilities and Equity	$1,877,900		$3,560,400

Problem 2-5 (continued)

Change in Cash	
Cash from stock issue ($37 × 30,000)	$1,110,000
Less: Cash paid for acquisition	(800,000)
Plus: Cash acquired in acquisition	95,000
Total change in cash	$ 405,000

Goodwill:	
Cost of acquisition	$1,100,000
Net assets acquired ($340,000 + $179,500 + $184,000)	703,500
Excess cost over net assets acquired	$396,500
Assigned to plant assets	215,000
Goodwill	$ 181,500

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

Problem 2-6

Ping Company
Pro Forma Income Statement for the Year 2011
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)	2,464,095	3,288,801
Gross Margin		3,057,171
Selling Expenses (4)	$785,910	
Other Expenses (5)	319,310	1,105,220
Net Income		$1,951,951

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

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

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

(2) ($1,752,360 × .30) + ($1,423,800 × .30 × .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) × .85 = $785,910

(5) $172,600 × 1.85 = $319,310

Problem 2-7A

Part A	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 × $2)		60,000
	Other Contributed Capital (30,000 × $26)		780,000

Cost of acquisition (30,000 × $28)	$840,000
Book value of net assets acquired ($120,000 + $164,000 + $267,000)	551,000
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% × $266,500)	93,275
Increase bonds payable to fair value	60,000
Deferred income tax asset (35% × $60,000)	(21,000)
Balance assigned to goodwill	$154,775

Part B	Income Tax Expense (Balancing amount)	148,006	
	Deferred Tax Liability ($51,125 × 35%)*	17,894	
	Deferred Tax Asset ($6,000 × 35%)		2,100
	Income Tax Payable ($468,000 × 35%)		163,800

*	Inventory:	$28,000
	Plant Assets, $\frac{\$100,000}{10}$	10,000
	Patents, $\frac{\$105,000}{8}$	13,125
	Total	$51,125