

Chapter 2 Stock Investments — Investor Accounting and Reporting

2.1 Multiple Choice Questions

1) What method of accounting will generally be used when one company purchases less than 20% of the outstanding stock of another company?

- A) Only the fair value method may be used.
- B) Only the equity method may be used.
- C) Either the fair value method or the equity method may be used, depending upon the relationship between the companies.
- D) Neither the fair value method nor the equity method may be used, regardless of the level of ownership.

Answer: C

Objective: LO1

Difficulty: Easy

2) What method of accounting will generally be used when one company purchases between 20% to 50% of the outstanding stock of another company?

- A) Only the fair value method may be used.
- B) Only the equity method may be used.
- C) The GAAP prescribed the equity method may be used.
- D) Neither the fair value method nor the equity method may be used, regardless of the level of ownership.

Answer: C

Objective: LO1

Difficulty: Easy

3) Which one of the following items, originally recorded in the Investment in Falcon Co. account under the equity method, would not be systematically used to reduce investment income on a periodic basis?

- A) Amortization expense of goodwill
- B) Depreciation expense on the excess fair value attributed to machinery
- C) Amortization expense on the excess fair value attributed to lease agreements
- D) Interest expense on the excess fair value attributed to long-term bonds payable

Answer: A

Objective: LO5

Difficulty: Moderate

4) Which one of the following statements is correct for an investor company?

- A) The balance in the Investment in Osprey Co. account can be reduced to represent a decline in the fair market value of the investment, but will not be adjusted if the fair market value increases.
- B) Under the equity method, the balance in the Investment in Osprey Co. account can be negative if the investee corporation operates at a loss.
- C) Once the balance in the Investment in Osprey Co. is reduced to zero, it will not be reduced any further.
- D) Under the equity method, the balance in the Investment in Osprey Co. account will increase when cash dividends are received.

Answer: C

Objective: LO2

Difficulty: Moderate

5) Pinkerton Inc. owns 10% of Sable Company. In the most recent year, Sable had net earnings of \$40,000 and paid dividends of \$6,000. Pinkerton's accountant mistakenly assumed Pinkerton had considerable influence over Sable and used the equity method instead of the cost method. What is the impact on the investment account and net earnings, respectively?

- A) By using the equity method, the accountant has understated the investment account and overstated the net earnings.
- B) By using the equity method, the accountant has overstated the investment account and understated the net earnings.
- C) By using the equity method, the accountant has understated the investment account and understated the net earnings.
- D) By using the equity method, the accountant has overstated the investment account and overstated the net earnings.

Answer: D

Objective: LO3

Difficulty: Moderate

6) Griffon Incorporated holds a 30% ownership in Duck Corporation. Griffon should use the equity method under which of the following circumstances?

- A) Griffon has surrendered significant stockholder rights by agreement between Griffon and Duck.
- B) Griffon has been unable to secure a position on the Duck Corporation's Board of Directors.
- C) Griffon has inadequate or untimely information to apply the equity method.
- D) The ownership of Duck Corporation is diverse.

Answer: D

Objective: LO1

Difficulty: Easy

7) Pond Corporation uses the fair value method of accounting for its investment in Swan Company. Which one of the following events would affect the Investment in Swan Co. account?

- A) Investee losses
- B) Investee dividend payments
- C) An increase in the investee's share price from last period
- D) All of the above would affect the Investment in Swan Co. account.

Answer: C

Objective: LO2

Difficulty: Easy

8) Sadie Corporation's stockholders' equity at December 31, 2013 included the following:

6% Preferred stock, \$10 par value	\$1,000,000
Common stock, \$1 par value	10,000,000
Other paid-in capital—common	4,000,000
Retained earnings	<u>4,000,000</u>
	<u>\$19,000,000</u>

Pilga Corporation purchased a 30% interest in Sadie's common stock from other shareholders on January 1, 2014 for \$5,800,000. What was the book value of Pilga's investment in Sadie on January 1, 2014?

- A) \$5,400,000
- B) \$5,700,000
- C) \$7,120,000
- D) \$7,440,000

Answer: A

Explanation: A)

Total stockholders' equity	\$19,000,000
Less: preferred equity	<u>(1,000,000)</u>
Equals: common equity	18,000,000
× Pilga's percentage	<u>× 30%</u>
Book value of Pilga investment	<u>\$5,400,000</u>

Objective: LO5

Difficulty: Moderate

9) Jabiru Corporation purchased a 20% interest in Fish Company common stock on January 1, 2013 for \$300,000. This investment was accounted for using the complete equity method and the correct balance in the Investment in Fish account on December 31, 2015 was \$440,000. The original excess purchase transaction included \$60,000 for a patent amortized at a rate of \$6,000 per year. In 2016, Fish Corporation had net income of \$4,000 per month earned uniformly throughout the year and paid \$20,000 of dividends in May. If Jabiru sold one-half of its investment in Fish on August 1, 2016 for \$500,000, how much gain was recognized on this transaction?

- A) \$278,950
- B) \$280,000
- C) \$280,950
- D) \$282,000

Answer: C

Explanation: C)

Dec 31, 2015 investment balance	\$440,000
Jabiru's interest in Fish's income from Jan 1-July 31:	
(\$4,000 × 7 months × 20%) =	5,600
Less: Dividends (\$20,000 × 20%) =	(4,000)
Less: Seven months of patent amortization:	
\$500 × 7 =	(3,500)
Investment account balance at July 31, 2016	<u>\$438,100</u>

Amount received from sale:	\$500,000
Book value of one-half interest	<u>(219,050)</u>
Gain on sale	<u>\$280,950</u>

Objective: LO5

Difficulty: Moderate

10) An investor uses the cost method of accounting for its investment in common stock. During the current year, the investor received \$25,000 in dividends, an amount that exceeded the investor's share of the investee company's undistributed income since the investment was acquired. The investor should report dividend income of what amount?

- A) \$25,000
- B) \$25,000 less the amount in excess of its share of undistributed income since the investment was acquired
- C) \$25,000 less the amount that is not in excess of its share of undistributed income since the investment was acquired
- D) None of the above is correct.

Answer: A

Objective: LO3

Difficulty: Easy

Use the following information to answer the question(s) below.

On January 1, 2013, Pansy Company acquired a 10% interest in Sunflower Corporation for \$80,000 when Sunflower's stockholders' equity consisted of \$400,000 capital stock and \$100,000 retained earnings. Book values of Sunflower's net assets equaled their fair values on this date. Sunflower's net income and dividends for 2013 through 2015 were as follows:

	<u>2013</u>	<u>2014</u>	<u>2015</u>
Net income	\$ 8,000	\$ 10,000	\$15,000
Dividends paid	5,000	5,000	5,000

11) Assume that Pansy Incorporated used the cost method of accounting for its investment in Sunflower. The balance in the Investment in Sunflower account at December 31, 2015 was

- A) \$76,700.
- B) \$80,000.
- C) \$83,300.
- D) \$95,000.

Answer: B

Explanation: B) Income and dividends are not added or deducted from the investment account under the cost method unless liquidating dividends are received

Objective: LO3

Difficulty: Moderate

12) Assume that Pansy has significant influence and uses the equity method of accounting for its investment in Sunflower. The balance in the Investment in Sunflower account at December 31, 2015 was

- A) \$78,200.
- B) \$80,000.
- C) \$81,800.
- D) \$83,300.

Answer: C

Explanation: C)

Initial Investment in Sunflower	\$80,000
adjustments:	

2013: $10\% \times (\$8,000 - \$5,000) =$	300
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2014: $10\% \times (\$10,000 - \$5,000) =$	500
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2015: $10\% \times (\$15,000 - \$5,000) =$	<u>1,000</u>
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Investment balance at 12/31/2015:	<u>\$81,800</u>
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Objective: LO3

Difficulty: Moderate

13) Pyming Corporation accounts for its 40% investment in Sillabog Company using the equity method. On the date of the original investment, fair values were equal to the book values except for a patent, which cost Pyming an additional \$40,000. The patent had an estimated life of 10 years. Sillabog has a steady net income of \$20,000 per year and consistently pays out 40% of its net income as dividends to its shareholders. Which one of the following statements is correct?

- A) The net change in the investment account for each full year will be a debit of \$8,000.
- B) The net change in the investment account for each full year will be a debit of \$4,800.
- C) The net change in the investment account for each full year will be a debit of \$800.
- D) The net change in the investment account for each full year will be a credit of \$800.

Answer: C

Objective: LO3

Difficulty: Moderate

14) Jacana Corporation paid \$200,000 for a 25% interest in Lilypad Corporation's common stock on January 1, 2013, but was not able to exercise significant influence over Lilypad. During 2014, Jacana reported income of \$120,000, excluding its income from Lilypad, and paid dividends of \$50,000. Lilypad reported net income of \$40,000 during 2014 and paid dividends of \$20,000. Jacana should report net income for 2014 in the amount of

- A) \$115,000.
- B) \$120,000.
- C) \$125,000.
- D) \$130,000.

Answer: C

Explanation: C)

Jacana's separate income	\$ 120,000
Dividend income from Lilypad	
equals \$20,000 × 25% =	<u>5,000</u>
Jacana's net income =	<u>\$ 125,000</u>

Objective: LO4

Difficulty: Moderate

15) Panda Corporation purchased 100,000 previously unissued shares of Skunk Company's \$10 par value common stock directly from Skunk for \$2,200,000. Skunk's stockholders' equity immediately before the investment by Panda consisted of \$3,000,000 of common stock and \$4,800,000 in retained earnings. What is Panda's book value of equity in the net assets of Skunk?

- A) \$2,200,000
- B) \$2,500,000
- C) \$3,000,000
- D) \$3,333,000

Answer: B

Explanation: B)

Shares outstanding before issue of new shares	300,000
Shares issued to Panda	<u>100,000</u>
Total shares outstanding	<u>400,000</u>

Percentage owned by Panda(100,000/400,000)	25.00%
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Stockholders' equity before issue of new shares	\$7,800,000
+ Investment by Panda	<u>2,200,000</u>
= Stockholders' equity after Panda investment	10,000,000
× Panda's percentage ownership	<u>25.00%</u>
= Book value of Panda's interest	<u>\$2,500,000</u>

Objective: LO5

Difficulty: Difficult

16) The income from an equity method investee is reported on one line of the investor company's income statement except when

- A) the cost method is used.
- B) the investee has extraordinary items.
- C) the investor company is amortizing cost-book value differentials.
- D) the investor company changes from the cost to the equity method.

Answer: B

Objective: LO5

Difficulty: Easy

17) Bart Company purchased a 30% interest in Simpson Corporation on January 1, 2013, and Bart accounted for its investment in Simpson under the equity method for the next 3 years. On January 1, 2016, Bart sold one-half of its interest in Simpson after which it could no longer exercise significant influence over Simpson. Bart should

- A) continue to account for its remaining investment in Simpson under the equity method for the sake of consistency.
- B) adjust the investment in Simpson account to one-half of its original amount and account for the remaining 15% interest using the equity method.
- C) account for the remaining investment under the cost method, using the investment in Simpson account balance immediately after the sale as the new cost basis.
- D) adjust the investment account to one-half of its original amount (one-half of the purchase price in 2013), and account for the remaining 15% investment under the cost method.

Answer: C

Objective: LO5

Difficulty: Easy

18) Pelican Corporation acquired a 25% interest in Seafare Incorporated at book value several years ago. Seafare declared \$100,000 dividends in 2013 and reported its income for the year as follows:

Income from continuing operations	\$600,000
Loss on discontinued division	<u>(100,000)</u>
Net income	<u>\$500,000</u>

Pelican's Investment in Seafare account for 2013 should increase by

- A) \$ 100,000.
- B) \$ 125,000.
- C) \$ 150,000.
- D) \$ 180,000.

Answer: A

Explanation: A)

Pelican's share of income ($\$500,000 \times 25\%$) =	\$125,000
Pelican's share of dividends = $\$100,000 \times 25\%$	<u>(25,000)</u>
Increase in investment account	\$100,000

Objective: LO5

Difficulty: Moderate

19) In reference to intercompany transactions between an investor and an investee, when the investor can significantly influence the investee, which of the following statements is correct, assuming that the investor is using the equity method?

- A) There is the presumption of arms-length bargaining between the related parties.
- B) As long as the investor recognizes the effects of the transaction in its financial statements, it is not required to provide any additional disclosures.
- C) In reporting its share of earnings and losses of an investee, the investor must eliminate the effect of profits and losses on the intercompany transactions until they are realized.
- D) None of the above is correct.

Answer: C

Objective: LO5

Difficulty: Easy

20) In reference to the determination of goodwill impairment, which of the following statements is correct?

- A) The goodwill impairment test under FASB 142 is a three-step process.
- B) If the reporting unit's fair value exceeds its carrying value, goodwill is unimpaired.
- C) Under FASB 142, firms must first compare carrying values (book values) at the firm level.
- D) All of the above are correct.

Answer: B

Objective: LO6

Difficulty: Easy

21) Firms must conduct impairment tests more frequently than annually when

A) other shareholders hold more than 50% interest.

B) a "more likely than not" expectation exists that a reporting unit will be sold or disposed of.

C) a specific unit does not have publicly traded stock.

D) using the equity method.

Answer: B

Objective: LO6

Difficulty: Easy

2.2 Exercises

1) Plum Corporation paid \$700,000 for a 40% interest in Satin Company on January 1, 2013 when Plum's stockholders' equity was as follows:

10% cumulative preferred stock, \$100 par	\$500,000
Common stock, \$10 par value	300,000
Other paid-in capital	400,000
Retained earnings	<u>800,000</u>
Total stockholders' equity	<u>\$2,000,000</u>

On this date, the book values of Plum's assets and liabilities equaled their fair values and there were no dividends in arrears.

Required: Calculate the amount recorded in the Investment in Satin Company and the amount of implied Goodwill in this transaction.

Answer:

Cost of Satin investment (amount recorded in the Investment account):	\$700,000
Less: book value acquired:	
Total equity	\$2,000,000
Less: Preferred equity	<u>(500,000)</u>
Net common equity	1,500,000
× percent acquired	<u>× 40%</u>
= Plum book value acquired	<u>(600,000)</u>
Goodwill	<u>\$100,000</u>

Objective: LO5

Difficulty: Moderate

2) Pike Corporation paid \$100,000 for a 10% interest in Salmon Corp. on January 1, 2013, when Salmon's stockholders' equity consisted of \$800,000 of \$10 par value common stock and \$200,000 retained earnings. On December 31, 2014, after receipt of the year's dividends from Salmon, Pike paid \$192,000 for an additional 20% interest in Salmon Corp. Both of Pike's investments were made when Salmon's book values equaled their fair values. Salmon's net income and dividends for 2013 and 2014 were as follows:

	<u>2013</u>	<u>2014</u>
Net income	\$60,000	\$140,000
Dividends	\$20,000	\$40,000

Required:

1. Prepare journal entries for Pike Corporation to account for its investment in Salmon Corporation for 2013 and 2014.

2. Calculate the balance of Pike's investment in Salmon at December 31, 2014

Answer:

Requirement 1

Date	Accounts	<u>Debit</u>	<u>Credit</u>
01/01/13	Investment in Salmon	100,000	
	Cash		100,000
12/31/13	Cash	2,000	
	Dividend Income		2,000
12/31/14	Cash	4,000	
	Dividend Income		4,000
12/31/14	Investment in Salmon	192,000	
	Cash		192,000
12/31/14	Investment in Salmon	14,000	
	Retained Earnings		14,000

Requirement 2

Calculation of investment balance

Cost of initial purchase of a 10% interest	\$100,000
Cost of second purchase of a 20% interest	192,000
Adjustment for cost to equity basis	<u>14,000</u>
Investment balance, December 31, 2014	<u>\$306,000</u>

Objective: LO5

Difficulty: Moderate

3) Pancake Corporation saw the potential for vertical integration and purchases a 15% interest in Syrup Corp. on January 1, 2013, for \$150,000. At that date, Syrup's stockholders' equity included \$200,000 of \$10 par value common stock, \$300,000 of additional paid in capital, and \$500,000 retained earnings. The companies began to work together and realized improved sales by both parties. On December 31, 2014, Pancake paid \$250,000 for an additional 20% interest in Syrup Corp. Both of Pancake's investments were made when Syrup's book values equaled their fair values. Syrup's net income and dividends for 2013 and 2014 were as follows:

	<u>2013</u>	<u>2014</u>
Net income	\$220,000	\$330,000
Dividends	\$20,000	\$30,000

Required:

1. Prepare journal entries for Pancake Corporation to account for its investment in Syrup Corporation for 2013 and 2014.

2. Calculate the balance of Pancake's investment in Syrup at December 31, 2014

Answer:

Requirement 1

Date	Accounts	<u>Debit</u>	<u>Credit</u>
01/01/13	Investment in Syrup	150,000	
	Cash		150,000
12/31/13	Cash	3,000	
	Dividend Income		3,000
12/31/14	Cash	4,500	
	Dividend Income		4,500
12/31/14	Investment in Syrup	250,000	
	Cash		250,000
12/31/14	Investment in Syrup	75,000	
	Retained Earnings		75,000

Requirement 2

Calculation of investment balance

Cost of initial purchase of a 15% interest	\$150,000
Cost of second purchase of a 20% interest	250,000
Adjustment for cost to equity basis	<u>75,000</u>
Investment balance, December 31, 2014	<u>\$475,000</u>

Objective: LO5

Difficulty: Moderate

4) Wader's Corporation paid \$120,000 for a 25% interest in Shell Company on July 1, 2014. No information is available on the fair value of Shell's assets and liabilities. Assume the equity method. Shell's trial balances at July 1, 2014 and December 31, 2014 were as follows:

<u>Debits</u>	<u>December 31</u>	<u>July 1</u>
Current assets	\$100,000	\$50,000
Noncurrent assets	300,000	310,000
Expenses	160,000	120,000
Dividends (paid in June)	<u>40,000</u>	<u>40,000</u>
Total	<u>\$ 600,000</u>	<u>\$ 520,000</u>

<u>Credits</u>		
Current Liabilities	\$60,000	\$40,000
Capital stock (no change)	200,000	200,000
Retained earnings Jan. 1	100,000	100,000
Sales	<u>240,000</u>	<u>180,000</u>
Total	<u>\$600,000</u>	<u>\$520,000</u>

Required:

1. What is Wader's investment income from Shell for the year ending December 31, 2014?
2. Calculate Wader's investment in Shell at year end December 31, 2014.

Answer:

Requirement 1

Sales (increase in trial balance)	\$60,000
Less: Expense (increase in trial balance)	<u>(40,000)</u>
Net Income =	<u>\$20,000</u>

Wader's ownership of 25% yields \$5,000 investment income

Requirement 2

	<u>Debit</u>	<u>Credit</u>
Initial Investment	120,000	
Investment Income	<u>5,000</u>	
Total	125,000	

Objective: LO3

Difficulty: Moderate

5) On January 1, 2013, Platt Corporation purchased a 30% interest in Sandig Company for \$450,000. On this date, the fair values of Sandig's assets and liabilities are assumed to be the same as their book values. Platt will account for Sandig using the equity method. Sandig's adjusted trial balance at the date of acquisition and year end were as follows:

<u>Debits</u>	<u>December 31</u>	<u>January 1</u>
Current assets	\$160,000	\$120,000
Noncurrent assets	420,000	460,000
Expenses	390,000	
Dividends (paid June 30)	<u>40,000</u>	<u> </u>
Total	<u>\$1,010,000</u>	<u> </u>
<u>Credits</u>		
Current Liabilities	\$90,000	\$120,000
Capital stock	250,000	250,000
Beginning Retained earnings	140,000	140,000
Sales	<u>530,000</u>	<u> </u>
Total	<u>\$1,010,000</u>	<u> </u>

Required:

1. What is Platt's investment income from Sandig for the year ending December 31, 2013?
2. Calculate Platt's investment in Sandig at year end December 31, 2013.

Answer:

Requirement 1

Sales for the year ending December 31, 2013	\$530,000
Less: Expenses for the year ending December 31, 2013	<u>(390,000)</u>
Net income	140,000
Ownership percentage	<u>30%</u>
Investment income for 2013	<u>\$42,000</u>

Requirement 2

	<u>Investment in Sandig Company</u>	
	<u>Debit</u>	<u>Credit</u>
Initial Investment	450,000	
Investment Income 2013	42,000	
Dividends, 2013	<u> </u>	<u>12,000</u>
Ending Balance, 12/31/2013	480,000	
Objective: LO3		
Difficulty: Moderate		

6) Dotterel Corporation paid \$200,000 cash for 40% of the voting common stock of Swamp Land Inc. on January 1, 2013. Book value and fair value information for Swamp on this date is as follows:

	Book	Fair
<u>Assets</u>	<u>Values</u>	<u>Values</u>
Cash	\$60,000	\$60,000
Accounts receivable	120,000	120,000
Inventories	80,000	100,000
Equipment	<u>340,000</u>	<u>400,000</u>
	<u>\$ 600,000</u>	<u>\$ 680,000</u>
 <u>Liabilities & Equities</u>		
Accounts payable	\$200,000	\$200,000
Note payable	120,000	100,000
Capital stock	200,000	
Retained earnings	<u>80,000</u>	<u></u>
	<u>\$600,000</u>	<u>\$300,000</u>

Required:

Prepare an allocation schedule for Dotterel's investment in Swamp Land.

Answer: Investment cost	\$200,000
Book value acquired: $\$280,000 \times 40\% =$	<u>112,000</u>
Excess cost over book value acquired =	<u>\$ 88,000</u>

Schedule to Allocate Cost-Book Value Differentials

	Fair value - <u>Book value</u>	<u>Interest</u>	Amount <u>Assigned</u>
Inventories	\$20,000	40%	\$8,000
Equipment	60,000	40%	24,000
Notes payable	20,000	40%	<u>8,000</u>
Allocated to specific assets			\$40,000
Remainder allocated to goodwill			<u>48,000</u>
Excess of cost over book value acquired			<u>\$88,000</u>

Objective: LO5

Difficulty: Moderate

7) On January 1, 2013, Pendal Corporation purchased 25% of the outstanding common stock of Sedda Corporation for \$100,000 cash. Book value and fair value of Sedda's assets and liabilities at the time of acquisition are shown below.

<u>Assets</u>	<u>Book Values</u>	<u>Fair Values</u>
Cash	\$40,000	\$40,000
Accounts receivable	100,000	90,000
Inventories	40,000	50,000
Equipment	<u>180,000</u>	<u>210,000</u>
	<u>\$360,000</u>	<u>\$390,000</u>
<u>Liabilities & Equities</u>		
Accounts payable	\$110,000	\$110,000
Note payable	50,000	40,000
Capital stock	100,000	
Retained earnings	<u>100,000</u>	<u> </u>
	<u>\$360,000</u>	<u>\$150,000</u>

Required:

Prepare an allocation schedule for Pendal's investment in Sedda.

Answer: Investment cost \$100,000

Less: Book value acquired: $\$200,000 \times 25\% =$ (50,000)

Excess cost over book value acquired = \$ 50,000

Schedule to Allocate Cost-Book Value Differentials

	<u>Fair value- Book value</u>	<u>Interest</u>	<u>Amount Assigned</u>
Accounts receivable	(10,000)	25%	\$(2,500)
Inventories	10,000	25%	2,500
Equipment	30,000	25%	7,500
Notes payable	10,000	25%	<u>2,500</u>
Allocated to specific assets			\$10,000
Remainder allocated to goodwill			<u>40,000</u>
Excess of cost over book value acquired			<u>\$50,000</u>
Objective: LO5			
Difficulty: Moderate			

8) Sandpiper Inc. acquired a 30% interest in Shore Corporation for \$27,000 cash on January 1, 2013, when Shore's stockholders' equity consisted of \$30,000 of capital stock and \$20,000 of retained earnings. Shore Corporation reported net income of \$18,000 for 2013. The allocation of the \$12,000 excess of cost over book value acquired on January 1 is shown below, along with information relating to the useful lives of the items:

Overvalued receivables (collected in 2013)	\$(600)
Undervalued inventories (sold in 2013)	2,400
Undervalued building (6 years' useful life remaining at January 1, 2013)	3,600
Undervalued land	900
Unrecorded patent (8 years' economic life remaining at January 1, 2013)	3,200
Undervalued accounts payable (paid in 2013)	(300)
Total of excess allocated to identifiable assets and liabilities	9,200
Goodwill	<u>2,800</u>
Excess cost over book value acquired	<u>\$12,000</u>

Required:

Determine Sandpiper's investment income from Shore for 2013.

Answer: Sandpiper's share of Shore net income ($\$18,000 \times 30\%$)	\$5,400
Add: Overvalued accounts receivable collected in 2013	600
Add: Undervalued accounts payable paid in 2013	300
Less: Undervalued inventories sold in 2013	(2,400)
Less: Depreciation on building undervaluation $\$3,600/6$	(600)
Less: Amortization on patent $\$3,200/8$ years	<u>(400)</u>
Income from Shore	<u>\$2,900</u>

Objective: LO5

Difficulty: Moderate

9) On January 1, 2013, Pailor Inc. purchased 40% of the outstanding stock of Saska Company for \$300,000. At that time, Saska's stockholders' equity consisted of \$270,000 common stock and \$330,000 of retained earnings. Saska Corporation reported net income of \$360,000 for 2013. The allocation of the \$60,000 excess of cost over book value acquired is shown below, along with information relating to the useful lives of the items:

Overvalued receivables (collected in 2013)	\$(5,000)
Undervalued inventories (sold in 2013)	16,000
Undervalued building (4 years' useful life remaining at January 1, 2013)	24,000
Undervalued land	8,000
Unrecorded patent (6 years' economic life remaining at January 1, 2013)	18,000
Undervalued accounts payable (paid in 2013)	<u>(4,000)</u>
 Total of excess allocated to identifiable assets and liabilities	 57,000
Goodwill	<u>3,000</u>
Excess cost over book value acquired	<u>\$60,000</u>

Required:

Determine Pailor's investment income from Saska for 2013.

Answer: Pailor's share of Saska net income ($\$360,000 \times 40\%$)	\$144,000
Add: Overvalued accounts receivable collected in 2013	5,000
Add: Undervalued accounts payable paid in 2013	4,000
Less: Undervalued inventories sold in 2013	(16,000)
Less: Depreciation on building undervaluation $\$24,000/4$	(6,000)
Less: Amortization on patent $\$18,000/6$ years	<u>(3,000)</u>
Income from Saska	<u>\$128,000</u>

Objective: LO5

Difficulty: Moderate

10) Stilt Corporation purchased a 40% interest in the common stock of Shallow Company for \$2,660,000 on January 1, 2013, when the book value of Shallow's net equity was \$6,000,000. Shallow's book values equaled their fair values except for the following items:

	<u>Book Value</u>	<u>Fair Value</u>	<u>Difference</u>
Inventories	\$450,000	\$500,000	\$ 50,000
Land	100,000	450,000	350,000
Building-net	400,000	200,000	(200,000)
Equipment-net	350,000	400,000	50,000

Required:

Prepare a schedule to allocate any excess purchase cost to identifiable assets and goodwill.

Answer: Cost of Stilt's 40% investment in Shallow \$2,660,000

Less: Book value of net assets acquired:

 40% × \$6,000,000 of net equity = 2,400,000

Excess cost over book value acquired = \$ 260,000

Schedule to Allocate Cost-Book Value Differentials

	<u>Fair value - Book value</u>		<u>Interest</u>	<u>Amount Assigned</u>
Inventories	\$50,000	×	40%	\$20,000
Land	350,000	×	40%	140,000
Building-net	(200,000)	×	40%	(80,000)
Equipment-net	50,000	×	40%	<u>20,000</u>
Excess allocated to specific assets and liabilities				\$100,000
Excess allocated to goodwill				<u>\$160,000</u>
Calculated excess of cost over book value				<u>\$260,000</u>

Objective: LO5

Difficulty: Moderate

11) Paster Corporation was seeking to expand its customer base, and wanted to acquire a company in a market area it had not yet served. Paster determined that the Semma Company was already in the market they were pursuing, and on January 1, 2013, purchased a 25% interest in Semma to assure access to Semma's customer base. Paster paid \$800,000, at a time when the book value of Semma's net equity was \$3,000,000. Semma's book values equaled their fair values except for the following items:

	Book <u>Value</u>	Fair <u>Value</u>	<u>Difference</u>
Inventories	\$150,000	\$200,000	\$ 50,000
Land	80,000	100,000	20,000
Building-net	220,000	180,000	(40,000)
Equipment-net	260,000	310,000	50,000

Required:

Prepare a schedule to allocate any excess purchase cost to identifiable assets and goodwill.

Answer: Cost of Paster's 25% investment in Semma \$800,000

Less: Book Value of net assets acquired:

25% × \$3,000,000 of net equity = 750,000

Excess cost over book value acquired = \$50,000

Schedule to Allocate Cost-Book Value Differentials

	Fair value - <u>Book value</u>		<u>Interest</u>	Amount <u>Assigned</u>
Inventories	\$50,000	×	25%	\$12,500
Land	20,000	×	25%	5,000
Building-net	(40,000)	×	25%	(10,000)
Equipment-net	50,000	×	25%	<u>12,500</u>
Excess allocated to specific assets and liabilities				\$20,000
Excess allocated to goodwill				<u>\$30,000</u>
Calculated excess of cost over book value				<u>\$50,000</u>

Objective: LO5

Difficulty: Moderate

12) Pearl Corporation paid \$150,000 on January 1, 2013 for a 25% interest in Sandlin Inc. On January 1, 2013, the book value of Sandlin's stockholders' equity consisted of \$200,000 of common stock and \$200,000 of retained earnings. All the excess purchase cost over book value acquired was attributable to a patent with an estimated life of 5 years. During 2013 and 2014, Sandlin paid \$3,000 of dividends each quarter and reported net income of \$60,000 for 2013 and \$80,000 for 2014. Pearl used the equity method.

Required:

1. Calculate Pearl's income from Sandlin for 2013.
2. Calculate Pearl's income from Sandlin for 2014.
3. Determine the balance of Pearl's Investment in Sandlin account on December 31, 2014.

Answer: Cost of Pearl's 25% investment in Sandlin \$150,000

Less: Book value of net assets acquired:

25% × \$400,000 of net assets = 100,000

Excess cost over book value acquired = \$50,000

Requirement 1:

Pearl's 2013 income from Sandlin equals:

(25% × \$60,000) - \$10,000 of

patent amortization \$5,000

Requirement 2:

Pearl's 2014 income from Sandlin equals:

(25% × \$80,000) - patent amortization of \$10,000 = \$10,000

Requirement 3:

Initial investment in Sandlin \$150,000

Plus: Net change for 2013: (Income of \$5,000 - Dividends of \$3,000) 2,000

Plus: Net change for 2014: (Income of \$10,000 - Dividends of \$3,000) 7,000

Investment balance at December 31, 2014: \$159,000

Objective: LO5

Difficulty: Moderate

14) Shebing Corporation had \$80,000 of \$10 par value common stock outstanding on January 1, 2013, and retained earnings of \$120,000 on the same date. During 2013 and 2014, Shebing earned net incomes of \$30,000 and \$45,000, respectively, and paid dividends of \$8,000 and \$10,000, respectively.

On January 1, 2013, Pentz Company purchased 25% of Shebing's outstanding common stock for \$60,000. On January 1, 2014, Pentz purchased an additional 10% of Shebing's outstanding stock for \$30,200. The payments made by Pentz in excess of the book value of net assets acquired were attributed to equipment, with each excess value amount depreciable over 8 years under the straight-line method.

Required:

1. What is the adjustment to Investment Income for depreciation expense relating to Pentz's Investment in Shebing in 2013 and 2014?

2. What will be the December 31, 2014 balance in the Investment in Shebing account after all adjustments have been made?

Answer:

Calculation of Shebing's net assets at the end of each year:

Shebing's net assets on January 1, 2013	\$200,000
Plus: 2010 net income minus dividends (\$30,000 - \$8,000)	<u>22,000</u>
Shebing's net assets at December 31, 2013	\$222,000
Plus: 2011 net income minus dividends (\$45,000 - \$10,000)	<u>35,000</u>
Shebing's net assets at December 31, 2014	\$257,000

Pentz's adjusted fair value payments for equipment

Pentz's January 1, 2013 initial investment cost	\$60,000
Less: Pentz's share of Shebing's net assets on this date = (25% × \$200,000) =	<u>50,000</u>
Equals: fair value adjustment for equipment	<u>\$10,000</u>

Pentz's January 1, 2014 investment cost	\$30,200
Less: Pentz's share of Shebing's net assets on this date = (10% × \$222,000) =	<u>22,200</u>
Equals: fair value adjustment for equipment	<u>\$ 8,000</u>

Requirement 1:

2013 equipment depreciation (\$10,000/8 years) =	\$1,250
2014 equipment depreciation (\$10,000/8 years) + (\$8,000/8 years)=	\$2,250

Requirement 2:

Direct investment costs (\$60,000 + \$30,200) =	\$90,200
Plus: 2013 adjustments (25%) × (\$30,000 - \$8,000) - \$1,250 =	4,250
Plus: 2014 adjustments (35%) × (\$45,000 - \$10,000) - \$2,250=	<u>10,000</u>
Equals: December 31, 2014 investment account balance	<u>\$104,450</u>

Objective: LO5

Difficulty: Moderate

15) Shoreline Corporation had \$3,000,000 of \$10 par value common stock outstanding on January 1, 2012, and retained earnings of \$1,000,000 on the same date. During 2012, 2013, and 2014, Shoreline earned net incomes of \$400,000, \$700,000, and \$300,000, respectively, and paid dividends of \$300,000, \$550,000, and \$100,000, respectively.

On January 1, 2012, Pebble purchased 21% of Shoreline's outstanding common stock for \$1,240,000. On January 1, 2013, Pebble purchased 9% of Shoreline's outstanding stock for \$510,000, and on January 1, 2014, Pebble purchased another 5% of Shoreline's outstanding stock for \$320,000. All payments made by Pebble that are in excess of the appropriate book values were attributed to equipment, with each block depreciable over 20 years under the straight-line method.

Required:

1. What is the adjustment to Investment Income for depreciation expense for Pebble's investment in Shoreline in 2012, 2013, and 2014?
2. What will be the December 31, 2014 balance in the Investment in Shoreline account after all adjustments have been made?

Answer:

Calculation of Shoreline's net assets at the end of each year:

Shoreline's net assets on January 1, 2012	\$4,000,000
Plus: 2012 net income minus dividends (\$400,000 - \$300,000)	100,000
Shoreline's net assets at December 31, 2012	\$4,100,000
Plus: 2013 net income minus dividends (\$700,000 - \$550,000)	150,000
Shoreline's net assets at December 31, 2013	4,250,000
Plus: 2014 net income minus dividends (\$300,000 - \$100,000)	\$200,000
Shoreline's net assets at December 31, 2014	<u>\$4,450,000</u>

Pebble's adjusted fair value payments for equipment

Pebble's January 1, 2012 initial investment cost	\$1,240,000
Less: Pebble's share of Shoreline's net assets on this date = $(21\% \times \$4,000,000) =$	<u>840,000</u>
Equals: fair value adjustment for equipment	<u>\$400,000</u>

Pebble's January 1, 2013 investment cost	\$510,000
Less: Pebble's share of Shoreline's net assets on this date = $(9\% \times \$4,100,000) =$	<u>369,000</u>
Equals: fair value adjustment for equipment	<u>\$141,000</u>

Pebble's January 1, 2014 investment cost	\$320,000
Less: Pebble's share of Shoreline's net assets on this date = $(5\% \times \$4,250,000) =$	<u>212,500</u>
Equals: fair value adjustment for equipment	<u>\$107,500</u>

Requirement 1:

2012 equipment depreciation $(\$400,000/20 \text{ years}) =$	\$20,000
2013 equipment depreciation $(\$400,000/20 \text{ years}) + (\$141,000/20 \text{ years}) =$	\$ 27,050
2014 equipment depreciation $(\$400,000/20 \text{ years}) + (\$141,000/20 \text{ years}) + (\$107,500/20 \text{ years}) =$	\$32,425

Requirement 2:

Direct investment costs $(\$1,240,000 + \$510,000 + \$320,000) =$	\$2,070,000
Plus: 2012 adjustments $(21\% \times (\$400,000 - \$300,000) - \$20,000 =$	1,000
Plus: 2013 adjustments $(30\% \times (\$700,000 - \$550,000) - \$27,050 =$	17,950
Plus: 2014 adjustments $(35\% \times (\$300,000 - \$100,000) - \$32,425 =$	<u>37,575</u>
Equals: December 31, 2014 investment account balance	<u>\$2,126,525</u>

Objective: LO5

Difficulty: Difficult

16) For 2013 and 2014, Sabil Corporation earned net income of \$480,000 and \$640,000 and paid dividends of \$18,000 and \$20,000, respectively. At January 1, 2013, Sabil had \$200,000 of \$10 par value common stock outstanding and \$1,500,000 of retained earnings.

On January 1 of each of these years, Phyit Corporation bought 10% of the outstanding common stock of Sabil paying \$200,000 per 10% block on January 1, 2013 and 2014. All payments made by Phyit in excess of book value were attributable to equipment, which is depreciated over ten years on a straight-line basis.

Required:

1. If Phyit uses the cost method of accounting for its investment in Sabil, how much dividend income will Phyit recognize in 2013 and 2014, and what will be the balance in the investment account at the end of each year?
2. If Phyit has significant influence and can justify using the equity method of accounting, how much net investee income will Phyit recognize for 2013 and 2014?

Answer:

Requirement 1

2013 dividend income = $10\% \times \$18,000$ of dividends =	\$1,800
2014 dividend income = $20\% \times \$20,000$ of dividends =	\$4,000

Investment account

Jan 1, 2013 purchase =	<u>\$200,000</u>
Dec 31, 2013 balance =	\$200,000
Jan 1, 2014 purchase =	<u>\$200,000</u>
Dec 31, 2014 balance =	\$400,000

Calculation of Sabil's net assets at end of year:

Sabil net assets on January 1, 2013	\$1,700,000
Plus: 2013 net income minus dividends (\$480,000 - \$18,000)	<u>462,000</u>
Sabil net assets at December 31, 2013	\$2,162,000
Plus: 2014 net income minus dividends (\$640,000 - \$20,000)	<u>620,000</u>
Sabil net assets at December 31, 2014	<u>\$2,782,000</u>

Phyit's adjusted fair value payments for equipment

Phyit's January 1, 2013 initial investment cost	\$200,000
Less: Phyit's share of Sabil net assets on this date = $(10\% \times \$1,700,000) =$	<u>170,000</u>
Equals: fair value adjustment for equipment	<u>\$30,000</u>

Phyit's January 1, 2014 investment cost	\$ 200,000
Less: Phyit's share of Sabil net assets on this date = $(10\% \times \$2,162,000) =$	<u>(216,200)</u>
Equals: fair value adjustment for equipment	<u>\$ (16,200)</u>

2013 net income from Sabil = $(10\% \times 480,000) -$	
Depreciation of \$3,000 $(\$30,000/10 \text{ years}) =$	\$45,000

2014 net income from Sabil = $(20\% \times 640,000) -$	
depreciation of \$3,000 from the 2013 purchase +	
depreciation of \$1,620 from the 2014 purchase	
$(\$16,200/10 \text{ years})$ for a total depreciation of \$1,380.	\$126,620

Objective: LO5

Difficulty: Moderate

17) For 2012, 2013, and 2014, Squid Corporation earned net incomes of \$40,000, \$70,000, and \$100,000, respectively, and paid dividends of \$24,000, \$32,000, and \$44,000, respectively. On January 1, 2012, Squid had \$500,000 of \$10 par value common stock outstanding and \$100,000 of retained earnings.

On January 1 of each of these years, Albatross Corporation bought 5% of the outstanding common stock of Squid paying \$37,000 per 5% block on January 1, 2012, 2013, and 2014. All payments made by Albatross in excess of book value were attributable to equipment, which is depreciated over five years on a straight-line basis.

Required:

1. Assuming that Albatross uses the cost method of accounting for its investment in Squid, how much dividend income will Albatross recognize for each of the three years and what will be the balance in the investment account at the end of each year?
2. Assuming that Albatross has significant influence and uses the equity method of accounting (even though its ownership percentage is less than 20%), how much net investee income will Albatross recognize for each of the three years?

Answer:

Requirement 1:

2012 dividend income = $5\% \times \$24,000$ of dividends =	\$1,200
2013 dividend income = $10\% \times \$32,000$ of dividends =	\$3,200
2014 dividend income = $15\% \times \$44,000$ of dividends =	\$6,600

Investment account

Jan 1, 2012 purchase =	<u>\$37,000</u>
Dec 31, 2012 balance =	\$37,000
Jan 1, 2013 purchase =	<u>\$37,000</u>
Dec 31, 2013 balance =	\$74,000
Jan 1, 2014 purchase =	<u>\$37,000</u>
Dec 31, 2014 balance =	<u>\$111,000</u>

Requirement 2:

Calculation of Squid's net assets at end of year:

Squid net assets on January 1, 2012	\$600,000
Plus: 2012 net income minus dividends (\$40,000 - \$24,000)	<u>16,000</u>
Squid net assets at December 31, 2012	\$616,000
Plus: 2013 net income minus dividends (\$70,000 - \$32,000)	<u>38,000</u>
Squid net assets at December 31, 2013	\$654,000
Plus: 2014 net income minus dividends (\$100,000 - \$44,000)	<u>56,000</u>
Squid net assets at December 31, 2014	\$710,000

Albatross' adjusted fair value payments for equipment

Albatross' January 1, 2012 initial investment cost	\$37,000
Less: Albatross' share of Squid net assets on this date = $(5\% \times \$600,000) =$	<u>30,000</u>
Equals: fair value adjustment for equipment	<u>\$7,000</u>

Albatross' January 1, 2013 investment cost	\$37,000
Less: Albatross' 5% share of Squid net assets on this date = $(5\% \times \$616,000) =$	<u>30,800</u>
Equals: fair value adjustment for equipment	<u>\$6,200</u>

Albatross' January 1, 2014 investment cost	\$37,000
Less: Albatross' share of Squid net assets on this date = $(5\% \times \$654,000) =$	<u>32,700</u>
Equals: fair value adjustment for equipment	<u>\$4,300</u>

2012 net income from Squid (investee) = $(5\% \times 40,000) -$ Depreciation of \$1,400 $(\$7,000/5 \text{ years}) =$	\$600
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2013 net income from Squid (investee) = $(10\% \times 70,000) -$ depreciation of \$1,400 from the 2012 purchase and - depreciation of \$1,240 from the 2013 purchase $(\$6,200/5$ years) for a total depreciation of \$2,640.	\$4,360
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2014 net income from Squid (investee) = $(15\% \times 100,000)$ — depreciation of \$1,400 from the 2012 purchase and - depreciation of \$1,240 from the 2013 purchase and - depreciation of \$860 from the 2014 purchase $(\$4,300/5$ years) for a total depreciation of \$3,500.	\$11,500
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Objective: LO5

Difficulty: Difficult

18) On January 1, 2013, Petrel, Inc. purchased 70% of the outstanding voting common stock of Ocean, Inc., for \$2,600,000. The book value of Ocean's net equity on that date was \$3,100,000. Book values were equal to fair values except as follows:

<u>Assets & Liabilities</u>	<u>Book Values</u>	<u>Fair Values</u>
Equipment	\$ 250,000	\$ 190,000
Building	600,000	700,000
Note payable	270,000	240,000

Required:

Prepare a schedule to allocate any excess purchase cost to specific assets and liabilities.

Answer:

Cost of Petrel's 70% investment in Ocean	\$2,600,000
Less: Book value of net assets acquired:	
70% × 3,100,000 of net assets =	<u>2,170,000</u>
Excess cost over book value acquired =	<u>\$ 430,000</u>

Schedule to Allocate Cost-Book Value Differentials

	<u>Fair value - Book value</u>		<u>Interest</u>	<u>Amount Assigned</u>
Equipment	\$(60,000)	×	70%	\$(42,000)
Building	100,000	×	70%	70,000
Note payable	30,000	×	70%	<u>21,000</u>
Excess allocated to specific assets and liabilities				\$49,000
Excess allocated to goodwill				<u>381,000</u>
Calculated excess of cost over book value				<u>\$430,000</u>

Objective: LO5

Difficulty: Moderate

19) On January 1, 2013, Palgan, Co. purchased 75% of the outstanding voting common stock of Somil, Inc., for \$1,500,000. The book value of Somil's net equity on that date was \$2,000,000. Book values were equal to fair values except as follows:

<u>Assets & Liabilities</u>	<u>Book Values</u>	<u>Fair Values</u>
Inventory	\$ 225,000	\$ 253,000
Building	850,000	750,000
Note payable	320,000	304,000

Required:

Prepare a schedule to allocate any excess purchase cost to specific assets and liabilities.

Answer:

Cost of Palgan's 75% investment in Somil	\$1,500,000
Less: Book value of net assets acquired:	
75% × 2,000,000 of net assets =	1,500,000
Excess cost over book value acquired =	<u>\$ 0</u>

Schedule to Allocate Cost-Book Value Differentials

	<u>Fair value- Book value</u>		<u>Interest</u>	<u>Amount Assigned</u>
Inventory	\$ 28,000	×	75%	\$ 21,000
Building	(100,000)	×	75%	(75,000)
Note payable	16,000	×	75%	<u>12,000</u>
Excess allocated to specific assets and liabilities				\$ (42,000)
Excess allocated to goodwill				<u>42,000</u>
Calculated excess of cost over book value				<u>\$ 0</u>

Objective: LO5

Difficulty: Moderate

20) Keynse Company owns 70% of Subdia Incorporated. The Investment in Subdia qualifies as a business reporting unit under FASB 142, and Keynse has reported goodwill in the amount of \$200,000 with respect to its acquisition of Subdia. Subdia's \$10 par common stock is currently trading for \$92 per share, Subdia's account book balances and related fair values at December 31, 2013 are shown below.

	<u>Book Values</u>	<u>Fair Values</u>
Cash	\$2,000,000	\$2,000,000
Accounts Receivable	8,000,000	7,500,000
Plant assets — net	18,000,000	23,000,000
Patents	1,000,000	1,500,000
Accounts Payable	(9,000,000)	(9,000,000)
Notes Payable	(16,000,000)	(16,000,000)
Common Stock	(1,000,000)	
Retained Earnings	(3,000,000)	

Required: Determine if Goodwill has been impaired, and if so, the amount of adjustment that would be required.

Answer: Step 1: Determine if goodwill is impaired. Compare book value of reporting unit to fair value of reporting unit. (Book value of reporting unit includes goodwill.)

Fair value of reporting unit	\$9,000,000 (net assets)
Book value of reporting unit	\$4,200,000

Book value of reporting unit:

Common stock	\$1,000,000
Goodwill	200,000
Retained earnings	<u>3,000,000</u>
Total	<u>\$ 4,200,000</u>

Fair value of reporting unit:

Cash	\$2,000,000
Accounts receivable	7,500,000
Plant assets	23,000,000
Patents	1,500,000
Accounts payable	(9,000,000)
Notes payable	<u>(16,000,000)</u>
Total	<u>\$ 9,000,000</u>

If the reporting unit's fair value exceeds its book value(with goodwill), goodwill is not impaired. In this case, the reporting unit's fair value exceeds its book value, so goodwill is not impaired. No adjustment is required. No further work is needed.

Objective: LO6

Difficulty: Moderate