Chapter 2 Test Bank

STOCK INVESTMENTS-INVESTOR ACCOUNTING AND REPORTING

Multiple Choice Questions

LO1

- 1 When Eagle Company has less than 50% of the voting stock of Fish Corporation which of the following applies?
 - 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.
 - d. Neither the fair value method nor the equity method may be used.

Solution: c

LO3

- Which one of the following items, originally recorded in the *Investment in Falcon Co.* account under the equity method, would not be systematically charged to 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.

Solution: a

LO2

- 3 Which one of the following statements is correct for an investor company?
 - a. Once the balance in the *Investment in Osprey Co.* account reaches zero, it will not be reduced any further.
 - 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. Application of the equity method is discontinued when the investor's share of losses reduces the carrying amount of the investment to zero.
 - d. Under the equity method, any goodwill inherent or contained in the *Investment in Osprey Co.* account will be amortized to the income earned from the investee.

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Solution: c

LO₂

- 4 Kestral Inc. owns 10% of Mouse Company. In the most recent year, Mouse had net earnings of \$60,000 and paid dividends of \$8,000. Kestral's accountant mistakenly assumed considerable influence 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.

Solution: d

LO₂

- 5 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 Board of Directors.
 - c. Griffon's ownership is temporary.
 - d. The ownership of Duck Corporation is diverse.

Solution: d

LO3

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

Solution: c

7 Mudflat Corporation's stockholders' equity at December 31, 2004 included the following:

| 8% Preferred stock, \$10 par value | \$ 2,000,000 |
|------------------------------------|------------------|
| Common stock, \$1 par value | 20,000,000 |
| Other paid-in capital | 8,000,000 |
| Retained earnings | 8,000,000 |
| | \$ 38,000,000 |

Brolga Corporation purchased a 30% interest in Mudflat's common stock from other shareholders on January 1, 2005 for \$11,600,000. What was the book value of Brolga's investment in Mudflat?

- a. \$10,800,000
- b. \$11,400,000
- c. \$14,240,000
- d. \$14,880,000

Solution: a

| Total stockholders' equity | \$ 38,000,000 |
|---------------------------------|------------------|
| Less: preferred equity | 2,000,000 |
| Equals: common equity | 36,000,000 |
| x Brolga's percentage | 30% |
| Book value of Brolga investment | 10,800,000 |

LO5

- Jabiru Corporation purchased a 20% interest in Fish Company common stock on January 1, 2002 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, 2004 was \$440,000. The original excess purchase transaction included \$60,000 for a patent amortized at a rate of \$6,000 per year. In 2005, 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, 2005 for \$500,000, how much gain was recognized on this transaction?
 - a. \$278,950
 - b. \$280,000
 - c. \$280,950
 - d. \$282,000

Solution: c

| Dec 31, 2002 investment balance Jaribu's interest in Fish's income from Jan | \$ | 440,000 |
|--|----|------------------|
| 1-July 31: | | F (00 |
| $(\$4,000 \times 7 \text{ months } \times 20\$) =$ | , | 5,600 |
| Less: Dividends (\$20,000 x 20%) = | (| 4,000) |
| Less: Seven months of patent amortization: | | |
| $$500 \times 7 =$ | (| 3,500) |
| Investment account balance at July 31, 2003 | | <i>438,</i> 100 |
| | | |
| Amount received from sale: | \$ | 500,000 |
| Book value of one-half interest | | 219,050 |
| Gain on sale | \$ | 280 , 950 |

LO3

- 9 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.

Solution: a

Use the following information in answering questions 10 and 11.

On January 1, 2005, Coot Company acquired a 15% interest in Roost Corporation for \$120,000 when Roost's stockholder's equity consisted of \$600,000 capital stock and \$200,000 retained earnings. Book values of Roost's net assets equaled their fair values on this date. Roost's net income and dividends for 2005 through 2007 was as follows:

| | _ | 2005 | 2006 | 2007 |
|----------------|----|--------|--------------|--------------|
| Net income | \$ | 12,000 | \$ 15,000 | \$ 25,000 |
| Dividends paid | | 10,000 | 10,000 | 10,000 |

LO₃

- 10 Assume that Coot Incorporated used the cost method of accounting for its investment in Roost. The balance in the Investment in Roost account at December 31, 2007 was
 - a. \$118,000.
 - b. \$120,000.
 - c. \$121,800.
 - d. \$130,800.

Solution: b

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

LO₃

- 11 Assume that Coot has significant influence and uses the equity method of accounting for its investment in Roost. The balance in the *Investment in Roost* account at December 31, 2007 was
 - a. \$118,000.
 - b. \$120,000.
 - c. \$121,800.
 - d. \$123,300.

Solution: d

| Initial Investment in Roost | \$ 120,000 |
|-----------------------------------|----------------------|
| adjustments: | |
| 2003: 15% x (\$12,000-\$10,000)= | 300 |
| 2004: 15% x (\$15,000-\$10,000)= | 750 |
| 2005: 15% x (\$25,000-\$10,000)= | 2,250 |
| Investment balance at 12/31/2005: | \$ <i>123,300</i> |

LO3

- Swamphen Corporation accounts for its 30% investment in Frog 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 Swamphen an additional \$40,000. The patent had an estimated life of 10 years. Frog has a steady net income of \$20,000 per year and its dividend payout ratio is 40%. 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 \$400.
 - b. The net change in the investment account for each full year will be a debit of \$3,600.
 - c. The net change in the investment account for each full year will be a credit of \$400.
 - d. The net change in the investment account for each full year will be a credit of \$3,600.

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Solution: c

LO4

- 13 Jacana Corporation paid \$200,000 for a 25% interest in Lilypad Corporation's common stock on January 1, 2005, but was not able to exercise significant influence over Lilypad. During 2006, 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 2006 and paid dividends of \$20,000. Jacana should report net income for 2006 in the amount of
 - a. \$115,000.
 - b. \$120,000.
 - c. \$125,000.
 - d. \$130,000.

Solution: c

| Jacana's separate income | \$ 120,000 |
|------------------------------|---------------|
| Dividend income from Lilypad | |
| equals \$20,000 x 25% = | 5,000 |
| Jacana's net income = | \$ 125,000 |

LO4

- 14 Robin Corporation purchased 150,000 previously unissued shares of Nest Company's \$10 par value common stock directly from Nest for \$3,400,000. Nest's stockholder's equity immediately before the investment by Robin consisted of \$3,000,000 of capital stock and \$2,600,000 in retained earnings. What is the book value of Robin's investment in Nest?
 - a. \$1,500,000.
 - b. \$1,680,000.
 - c. \$2,800,000.
 - d. \$3,000,000.

Solution: d

| Shares outstanding before issue of new shares Shares issued to Robin | 300,000 150,000 |
|--|--------------------|
| Total shares outstanding | 450,000 |
| Percentage owned by Robin | |
| equals 150,000/450,000= | 33.33% |
| Stockholders' equity before issue of new shares | 5,600,000 |
| +Investment by Robin | 3,400,000 |
| =Stockholders' equity after Robin investment | 9,000,000 |
| x Robin's percentage ownership | 33.33% |
| =Book value of Robin's interest | 3,000,000 |

- 15 The income from an equity 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 or other "below the line" items.
 - c. the investor company is amortizing cost-book value differentials.
 - d. the investor company changes from the cost to the equity method.

Solution: b

LO5

- Bart Company purchased a 30% interest in Simpson Corporation on January 1, 2004, and Bart accounted for its investment in Simpson under the equity method for the next 3 years. On January 1, 2007, 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 Dak 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 2004), and account for the remaining 15% investment under the cost method.

Solution: c

17 Pelican Corporation acquired a 30% interest in Crustacean Incorporated at book value several years ago. Crustacean declared \$100,000 dividends in 2005 and reported its income for the year as follows:

| Income from continuing operations | \$700 , 000 |
|-----------------------------------|--------------------|
| Loss on discontinued division | (100,000) |
| Net income | \$600,000 |

Pelican's *Investment in Crustacean* account for 2003 should increase by

- a. \$ 150,000
- b. \$ 160,000
- c. \$ 180,000
- d. \$ 210,000

Solution: a

| Pelican's share of income (\$600,000 x 30%) = | \$ 180,000 |
|--|---------------|
| Pelican's share of dividends = \$100,000 x 30% | (30,000) |
| Increase in investment account | \$ 150,000 |

LO5

18 Cormorant Corporation paid \$800,000 for a 40% interest in Plumage Company on January 1, 2005 when Plumage's stockholder's 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 | | | 800,000 |
| Total stockholders' equity | | \$2 | ,000,000 |

On this date, the book values of Plumage's assets and liabilities equaled their fair values and there were no dividends in arrears. Goodwill from the investment is

- a. \$0.
- b. \$150,000.
- c. \$200,000.
- d. None of the above is correct.

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|---------------|-----|----|---|---|----------|---|---|
| So. | - / | 77 | + | 7 | α | • | C |
| \mathcal{O} | _ | и | L | _ | O_{II} | • | |

| Cost of Cormorant investment: | | \$ 800,000 |
|-------------------------------|-----------------|---------------|
| Less: book value acquired: | | |
| Total equity | \$ 2,000,000 | |
| Less: Preferred equity | 500,000 | |
| Net common equity | 1,500,000 | |
| x percent acquired | 40% | |
| = Plumage book value | 600,000 | 600,000 |
| Goodwill | | \$ 200,000 |

- In reference to material 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 transactions until they are realized.
 - d. None of the above is correct.

Solution: c

L06

- 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.

Solution: b

- 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 expectations exists that a unit will be sold or disposed of
 - c. a specific unit does not have publicly traded stock
 - d. using the equity method.

Solution: b

Exercises

LO3

Exercise 1

Crake Corporation paid \$50,000 for a 10% interest in Lagoon Corp. on January 1, 2004, when Lagoon's stockholders' equity consisted of \$400,000 of \$10 par value common stock and \$100,000 retained earnings. On December 31, 2005, Crake paid \$96,000 for an additional 20% interest in Lagoon Corp. Both of Crake's investments were made when Lagoon's book values equaled their fair values. Lagoon's net income and dividends for 2004 and 2005 were as follows:

| | 2004 | 2005 |
|------------|----------|-------------------|
| Net income | \$30,000 | \$70 , 000 |
| Dividends | \$10,000 | \$20,000 |

Required:

- 1. Prepare journal entries for Crake Corporation to account for its investment in Lagoon Corporation for 2004 and 2005.
- 2. Calculate the balance of Crake's investment in Lagoon at December 31, 2005.

Solution: Exercise 1

Requirement 1

| <u>Date</u> | Accounts | Debit | Credit |
|-------------|--|--------|------------------|
| 01/01/04 | Investment in Lagoon Cash | 50,000 | 50,000 |
| 12/31/04 | Cash Dividend Income | 1,000 | 1,000 |
| 12/31/05 | Cash Dividend Income | 2,000 | 2,000 |
| 12/31/05 | Investment in Lagoon Cash | 96,000 | 96,000 |
| Requiremen | <u>nt 2</u> | | |
| Calculati | on of investment balance | | |
| | nitial purchase of a 10% interest econd purchase of a 20% interest | Ş | 50,000 96,000 |
| | t balance, December 31, 2005 | S | 146,000 |

Exercise 2

Wader's Corporation paid \$120,000 for a 25% interest in Shell Company on July 1, 2005. No information is available on the fair value of Shell's assets and liabilities. Assume the equity method. Shell's trial balances were as follows:

| Debits | December 31 | July 1 |
|---------------------------|-------------|---------------------|
| Current assets | \$ 100,000 | \$ 50,000 |
| Noncurrent assets | 300,000 | 310,000 |
| Expenses | 160,000 | 120,000 |
| Dividends (paid in June) | 40,000 | 40,000 |
| Total | \$ 600,000 | \$ 520 , 000 |
| Credits | _ | _ |
| Current Liabilities | \$ 60,000 | \$ 40,000 |
| Capital stock (no change) | 200,000 | 200,000 |
| Retained earnings Jan. 1 | 100,000 | 100,000 |
| Sales | 240,000 | 180,000 |
| Total | \$ 600,000 | \$ 520,000 |

Required:

- 1. What is Wader's investment income from Shell for the year ending December 31, 2005?
- 2. Calculate Wader's investment in Shell at year end December 31, 2005.

Solution: Exercise 2

Requirement 1

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

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

Requirement 2

 Debit
 Credit

 Initial Investment
 120,000

 Investment Income
 5,000

 Total
 125,000

Exercise 3

Dotterel Corporation paid \$200,000 cash for 40% of the voting common stock of Swamp Land Inc. on January 1, 2005. Book value and fair value information for Swamp on this date is as follows:

| Book | Fair |
|------------|--|
| Values | Values |
| \$ 60,000 | \$ 60,000 |
| 120,000 | 120,000 |
| 80,000 | 100,000 |
| 340,000 | 400,000 |
| \$ 600,000 | \$ 680,000 |
| | |
| | |
| \$ 200,000 | \$ 200,000 |
| 120,000 | 100,000 |
| 200,000 | |
| 80,000 | |
| \$ 600,000 | \$ 300,000 |
| | Values \$ 60,000 120,000 80,000 340,000 \$ 600,000 \$ 200,000 120,000 200,000 |

Required:

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

Solution: Exercise 3

| Investment cost | \$ 200,000 |
|--|---------------|
| Book value acquired: \$280,000 x 40% = | 112,000 |
| Excess cost over book value acquired = | 88,000 |

Schedule to Allocate Cost-Book Value Differentials

| | Fair value- Book value | Interest | Amount Assigned |
|---------------------------|---------------------------|----------|-----------------------|
| Inventories | \$20,000 | 40% | \$ 8,000 |
| Equipment | 60 , 000 | 40% | 24,000 |
| Notes payable | 20,000 | 408 | 8,000 |
| Allocated to specific ass | ets | | \$ 40,000 |
| Remainder allocated to go | odwill | | 48,000 |
| | | | \$ 88 , 000 |

LO₅

Exercise 4

Sandpiper Inc. acquired a 30% interest in Shore Corporation for \$27,000 cash on January 1, 2005, 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 2005. 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 2005) Undervalued inventories (sold in 2005) Undervalued building (6 years' useful life | \$ (| 600) 2,400 |
|--|-------------|----------------|
| remaining at January 1, 2005) | | 3 , 600 |
| Undervalued land | | 900 |
| Unrecorded patent (8 years' economic life remaining at January 1, 2005) | | 3,200 |
| Undervalued accounts payable (paid in 2005) | (| 300) |
| Total of excess allocated to identifiable | | |
| assets and liabilities | | 9,200 |
| Goodwill | | 2,800 |
| Excess cost over book value acquired | > | 12,000 |

Required:

Determine Sandpiper's investment income from Shore for 2005.

Solution: Exercise 4

| Sandpiper's share of Shore net income (\$18,000 x 30%) | \$ | 5,400 |
|---|----|----------------|
| Add: Overvalued accounts receivable collected in 2005 | | 600 |
| Add: Undervalued accounts payable paid in 2005 | | 300 |
| Less: Undervalued inventories sold in 2005 | (| 2,400) |
| Less: Depreciation on building undervaluation \$3,600/6 | (| 600) |
| Less: Amortization on patent \$3,200/8 years | (| 400) |
| Income from Shore | \$ | 2 , 900 |

LO5 Exercise 5

Stilt Corporation purchased a 40% interest in the common stock of Shallow Company for \$2,660,000 on January 1, 2005, 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:

| | Book | Fair | | | |
|---------------|---------------|---------------|----|------------|---|
| | Value | Value |] | Difference | € |
| 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.

Solution: Exercise 5

| Cost of Stilt's 40% investment in Shallow | \$ | 2,660,000 |
|---|----|------------------|
| Less: Value of net assets acquired: | | |
| $40% \times $6,000,000 \text{ of net equity} =$ | _ | 2,400,000 |
| Excess cost over book value acquired = | \$ | 260 , 000 |

Schedule to Allocate Cost-Book Value Differentials

| _ | | _ | Interest | | Amount Assigned |
|------|----------------|---------------------------------|--|---|---|
| | 50,000 | X | 40% | \$ | 20,000 |
| | <i>350,000</i> | X | 40% | | 140,000 |
| (| 200,000) | X | 40% | | (80,000) |
| | 50,000 | X | 40% | | 20,000 |
| ass | ets and li | abi | lities | \$ | 100,000 |
| | | | | \$ | 160,000 |
| er b | ook value | | | \$ | 260,000 |
| | Bo (ass | 350,000 (200,000) 50,000 | Book value 50,000 x 350,000 x (200,000) x 50,000 x assets and liabi | Book value Interest 50,000 x 40% 350,000 x 40% (200,000) x 40% 50,000 x 40% assets and liabilities | Book value Interest 50,000 x 40% \$ 350,000 x 40% 40% (200,000) x 40% 50,000 x 40% assets and liabilities \$ \$ \$ |

Exercise 6

Curlew Corporation paid \$50,000 on January 1, 2005 for a 20% interest in Waterway Inc. On January 1, 2005, Waterway's stockholders' equity consisted of \$100,000 of common stock and \$100,000 of retained earnings. All the excess purchase cost over book value was attributable to a patent with an estimated life of 8 years. During 2005 and 2006, Waterway paid \$2,500 of dividends each quarter and reported net income of \$30,000 for 2005 and \$20,000 for 2006. Curlew used the equity method.

Required:

- 1. Calculate Curlew's income from Waterway for 2005.
- 2. Calculate Curlew's income from Waterway for 2006.
- 3. Determine the balance of Curlew's *Investment in Waterway* account on December 31, 2006.

Solution: Exercise 6

| Cost of Curlew's 20% investment in Waterway Less: Value of net assets acquired: | \$ | 50,000 |
|--|-----------|-----------------|
| 20% x \$400,000 of net assets = Excess cost over book value acquired = | <i>\$</i> | 40,000 |
| Requirement 1: | | |
| Curlew's 2005 income from Waterway equals: (20% x \$30,000) - \$1,250 of patent amortization | \$ | 4 , 750 |
| Requirement 2: | | |
| Curlew's 2006 income from Waterway equals: (20% x \$20,000) - patent amortization of \$1,250 = | | |
| Requirement 3: | \$ | 2 , 750 |
| Initial investment in Waterway Plus: Net change for 2005: (Income of \$4,750 - Dividends of \$2,000) | \$ | 50,000 2,750 |
| Plus: Net change for 2006: (Income of \$2,750 - Dividends of \$2,000) | | 750 |
| Investment balance at December 31, 2006: | \$ | 53 , 500 |

T₁O_.5

Exercise 7

Lowtide Corporation had \$300,000 of \$10 par value common stock outstanding on January 1, 2004, and retained earnings of \$100,000 on the same date. During 2004, 2005, and 2006, Lowtide earned net incomes of \$40,000, \$70,000, and \$30,000, respectively, and paid dividends of \$30,000, \$55,000, and \$10,000, respectively.

On January 1, 2004, Avocet purchased 21% of Lowtide's outstanding common stock for \$124,000. On January 1, 2005, Avocet purchased 9% of Lowtide's outstanding stock for \$51,000, and on January 1, 2006, Avocet purchased another 5% of Lowtide's outstanding stock for \$32,000. All payments made by Avocet that are in excess of the appropriate book values were attributed to equipment, with each block depreciable over 10 years under the straight-line method.

Required:

- 1. How much depreciation expense will Avocet record in 2004, 2005, and 2006?
- 2. What will be the December 31, 2006 balance in the *Investment in Lowtide* account after all adjustments have been made?

Solution: Exercise 7

| Calculation of Lowtide's net assets at the end of each | year: | : |
|---|----------|--------------------|
| Lowtide's net assets on January 1, 2004 | \$ | 400,000 |
| Plus: 2001 net income minus dividends (\$40,000-\$30,000) | | 10,000 |
| Lowtide's net assets at December 31, 2004 | \$ | 410,000 |
| Plus: 2002 net income minus dividends (\$70,000-\$55,000) | | 15,000 |
| Lowtide's net assets at December 31, 2005 | | 425,000 |
| Plus: 2003 net income minus dividends (\$30,000-\$10,000) | \$ | 20,000 |
| Lowtide's net assets at December 31, 2006 | \$ | 445,000 |
| | = | |
| | | |
| Avocet's adjusted fair value payments for equipment | | |
| Avocet's January 1, 2004 initial investment cost | \$ | 124,000 |
| Less: Avocet's share of Lowtide's net assets on this | ! | |
| $date = (21% \times $400,000) =$ | | <i>84,000</i> |
| Equals: fair value adjustment for equipment | \$ | 40,000 |
| | | |
| Avocet's January 1, 2005 investment cost | \$ | 51,000 |
| Less: Albion's share of Lowtide's net assets on this | ; | |
| $date = (9% \times $410,000) =$ | | <i>36,900</i> |
| Equals: fair value adjustment for equipment | \$ | 14,100 |
| | | |
| Avocet's January 1, 2006 investment cost | \$ | 32,000 |
| Less: Avocet's share of Lowtide's net assets on this | | , |
| date = (5% x \$425,000) = | | 21,250 |
| Equals: fair value adjustment for equipment | \$ | 10,750 |
| | , | |
| Requirement 1 | | |
| 2004 equipment depreciation (\$40,000/10 years)= | \$ | 4,000 |
| | , | -, |
| 2005 equipment depreciation (\$40,000/10 years) + | | |
| (\$14,100/10 years)= | \$ | 5,410 |
| | | |
| 2006 equipment depreciation (\$40,000/10 years) + | | |
| (\$14,100/10 years) + (\$10,750/10 years)= | \$ | 6 , 485 |
| | | |
| Requirement 2: | <u> </u> | 007 000 |
| Direct investment costs (\$124,000+\$51,000+\$32,000) = | | • |
| Plus: 2004 adjustments $(21\%) \times (\$40,000-\$30,000) -\$4,000 =$ | | (1,900) (910) |
| Plus: 2005adjustments $(30\%) \times (\$70,000-\$55,000)-\$5,410 =$ Plus: 2006 adjustments $(35\%) \times (\$30,000-\$10,000)-\$6,485 =$ | | (910) 515 |
| Equals: December 31, 2006 investment account balance | | |
| Equals: December 31, 2000 investment account balance | \$ | 204,705 |

T₁O_.5

Exercise 8

For 2003, 2004, and 2005, 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. At the beginning of 2003, 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, 2003, 2004, and 2005. 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?

Solution: Exercise 8

| Requirement 1 | |
|--|---------------------|
| 2003 dividend income = 5% x \$24,000 of dividends = | \$ 1,200 |
| 2004 dividend income = 10% x \$32,000 of dividends = | \$ 3,200 |
| 2005 dividend income = 15% x $$44,000$ of dividends = | \$ 6,600 |
| | |
| Investment account | |
| Jan 1, 2003 purchase = | \$ 37,000 |
| Dec 31, 2003 balance = | \$ 37,000 |
| Jan 1, 2004 purchase = | \$ 37,000 |
| Dec 31, 2004 balance = | \$ 74,000 |
| Jan 1, 2005 purchase = | \$ <i>37,000</i> |
| Dec 31, 2005 balance = | \$ 111,000 |

| Requirement 2: | | | |
|---|----|-----|---|
| Calculation of Squid's net assets at end of year: | | | |
| Squid net assets on January 1, 2003 | \$ | | 500,000 |
| Plus: 2003 net income minus dividends (\$40,000-\$24,000) | | 0 | 16,000 |
| Squid net assets at December 31, 2003 | \$ | 6 | 516,000 |
| Plus: 2004 net income minus dividends (\$70,000-\$32,000) | | | 38,000 |
| Squid net assets at December 31, 2004 | \$ | - 6 | 654,000 |
| Plus: 2005 net income minus dividends (\$100,000-\$44,000) | | | 56,000 |
| Squid net assets at December 31, 2005 | \$ | | 710,000 |
| | | | |
| Albatross' adjusted fair value payments for equipment | | | |
| Albatross' January 1, 2003 initial investment cost | \$ | | 37,000 |
| Less: Albatross' share of Squid net assets on this date | , | | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, |
| = (5% x \$600,000) = | | | 30,000 |
| Equals: fair value adjustment for equipment | \$ | | 7,000 |
| qualsva_r value aayasemene _ror equipmene | , | | ,,,,,, |
| Albatross' January 1, 2004 investment cost | \$ | | 37,000 |
| Less: Albatross' 5% share of Squid net assets on this | Ų | | 37,000 |
| date = $(5% \times $616,000)$ = | | | 30,800 |
| • | خ | | |
| Equals: fair value adjustment for equipment | \$ | | 6,200 |
| | _ | | |
| Albatross' January 1, 2005 investment cost | \$ | | 37,000 |
| Less: Albatross' share of Squid net assets on this date | | | 20 700 |
| $= (5% \times $654,000) =$ | | | 32,700 |
| Equals: fair value adjustment for equipment | \$ | | 4,300 |
| | | | |
| 2003 net income from Squid (investee) = $(5\% \times 40,000)$ - | | | |
| Depreciation of \$1,400 (\$7,000/5 years) = | \$ | (| 600 |
| | | | |
| 2004 net income from Squid (investee) = $(10\% \times 70,000)$ - | | | |
| depreciation of \$1,400 from the 2003 purchase and - | | | |
| depreciation of \$1,240 from the 2004 purchase (\$6,200/5 | Ş | | 4,360 |
| years) for a total depreciation of \$2,640. | | | |
| 2005 not income from Couried (incomes) (15% or 100 000) | | | |
| 2005 net income from Squid (investee) = $(15\% \times 100,000)$ | | | |
| - depreciation of \$1,400 from the 2003 purchase and - depreciation of \$1,240 from the 2004 purchase and - | Ċ | | 11,500 |
| depreciation of \$860 from the 2005 purchase (\$4,300/5) | Y | | 11,000 |
| years) for a total depreciation of \$3,500. | | | |
| years, for a cotal appropriation of 40,000. | | | |

LO5 Exercise 9

On January 1, 2005, 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:

| | Book | Fair |
|----------------------|------------|------------|
| Assets & Liabilities | Values | Values |
| 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.

Solution: Exercise 9

| Cost of Petrel's 80% investment in Ocean | \$ 2,600,000 |
|--|-----------------|
| Less: Value of net assets acquired: | |
| 70% \times 3,100,000 of net assets = | 2,170,000 |
| Excess cost over book value acquired = | \$ 430,000 |

Schedule to Allocate Cost-Book Value Differentials

| | | Fair value- Book value | | Interest | | Amount Assigned |
|-----------------------|------------|---------------------------|--------|----------|---------------|--------------------|
| Equipment | \$ | (60,000) | - X | 70% | - <i>\$</i> - | (42,000) |
| Building | | 100,000 | X | 70% | | 70,000 |
| <i>Note payable</i> | | 30,000 | X | 70% | | 21,000 |
| Excess allocated to s | specific a | assets and li | abi | lities | \$ | 49,000 |
| Excess allocated to g | roodwill | | | | | 381,000 |
| Calculated excess of | cost ove | r book value | | | \$ | 430,000 |
| | | | | | | |

L05

Exercise 10

On January 1, 2005, Shearwater, Co. purchased 60% of the outstanding voting common stock of Colony, Inc., for \$1,800,000. The book value of Colony's net equity on that date was \$3,000,000. Book values were equal to fair values except as follows:

| | Book | Fair | | |
|----------------------|------------|------------------|--|--|
| Assets & Liabilities | Values | Values | | |
| Inventory | \$ 200,000 | \$ 225,000 | | |
| Building | 850,000 | 750 , 000 | | |
| Note payable | 300,000 | 320,000 | | |

Required:

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

Solution: Exercise 10

| Cost of Shearwater's 60% investment in Colony | \$ 1,800,000 |
|--|-----------------|
| Less: Value of net assets acquired: | |
| $60% \times 3,000,000 \text{ of net assets} =$ | 1,800,000 |
| Excess cost over book value acquired = | \$ 0 |

Schedule to Allocate Cost-Book Value Differentials

| | | Fair value- Book value | _ | Interest | | mount signed |
|---------------------|-------------|---------------------------|-----|----------|---------|-----------------|
| Inventory | \$ | <i>25,</i> 000 | X | 60% | \$ | 15,000 |
| Building | | (100,000) | X | 60% | (| 60,000) |
| <i>Note payable</i> | | (20,000) | X | 60% | (| 12,000) |
| Excess allocated | to specific | assets and li | abi | lities | \$ (| 57,000) |
| Excess allocated | to goodwill | | | | | <i>57,000</i> |
| Calculated excess | of cost ove | er book value | | | \$ _ | 0 |