# Appendix E

**Investments**

**Short Exercises**

**(10 min.) E-S-1**

|  |  |
| --- | --- |
| **BALANCE SHEET** |  |
| **Current assets:** |  |
| **Investment in equity securities** | **$90,000** |
|  |  |
| **INCOME STATEMENT** |  |
| **Other revenue and gains (losses):** |  |
| **Unrealized gain on equity securities** | **$ 7,000\*** |

**\_\_\_\_\_**

**\*$90,000 − $83,000 = $7,000**

**(10 min.) E-S-2**

***Req. 1***

|  |  |  |  |
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| Journal | | | |
| **DATE** | **ACCOUNT TITLES AND EXPLANATION** | **DEBIT** | **CREDIT** |

|  |  |  |  |
| --- | --- | --- | --- |
| **Unrealized Loss on Equity Securities ($110,000 − $88,000)** | | **22,000** |  |
| Investment in Equity Securities | |  | **22,000** |
| **Adjusted investment to market value.** | |  |  |
|  | ***Req. 2*** |  |  |
|  |  |  |  |
| **BALANCE SHEET** | | |  |
| **Current assets:** | | |  |
| **Investment in equity securities** | | | **$88,000** |
|  |  |  |  |
| **INCOME STATEMENT** | |  |  |
| **Other revenues and gains (losses):** | |  |  |
| **Unrealized loss on equity securities** | | | **$(22,000)** |

**(5-10 min) E-S-3**

|  |  |  |  |  |
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| Journal | | | | |
| **DATE** | | **ACCOUNT TITLES AND EXPLANATION** | **DEBIT** | **CREDIT** |
| **2018** | |  |  |  |
| **Mar.** | **23** | **Investment in Equity Securities (900 × $79.24)** | **71,316** |  |
|  |  | **Cash** |  | **71,316** |
|  |  |  |  |  |
| **June** | **22** | **Cash (900 × $0.31)** | **279** |  |
|  |  | **Dividend Revenue** |  | **279** |
|  |  |  |  |  |

**(5-10 min) E-S-4**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Journal | | | | |
| **DATE** | | **ACCOUNT TITLES AND EXPLANATION** | **DEBIT** | **CREDIT** |
| **2018** | |  |  |  |
| **Dec.** | **31** | **Investment in Equity Securities [(900 × $88.13) – $71,316]** | **8,001** |  |
|  |  | **Unrealized Gain on Equity Securities** |  | **8,001** |

**(5-10 min) E-S-5**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Journal | | | | |
| **DATE** | | **ACCOUNT TITLES AND EXPLANATION** | **DEBIT** | **CREDIT** |
| **2019** | |  |  |  |
| **Nov.** | **22** | **Cash** | **67,050** |  |
|  |  | **Loss on Sale of Equity Securities** | **12,267** |  |
|  |  | **Investment in Equity Securities** |  | **79,317** |

**(15-20 min.) E-S-6**

***Req. 1***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Journal | | | | |
| **DATE** | | **ACCOUNT TITLES AND EXPLANATION** | **DEBIT** | **CREDIT** |
| **2018** | |  |  |  |
| **Apr.** | **10** | **Investment in Equity Securities (400 × $18)** | **7,200** |  |
|  |  | **Cash** |  | **7,200** |
|  |  |  |  |  |
| **July** | **22** | **Cash (400 × $1.21)** | **484** |  |
|  |  | **Dividend Revenue** |  | **484** |
|  |  |  |  |  |
| **Dec.** | **31** | **Unrealized Loss on Equity Securities** | **2,300** |  |
|  |  | **Investment in Equity Securities ($7,200 −** |  |  |

**$4,900)……………………………………… 2,300**

***Req. 2***

**The income statement will report dividend revenue of $484 and unrealized loss on equity securities of $2,300.**

***Req. 3***

|  |  |
| --- | --- |
| ASSETS |  |
| **Total current assets…………………………………........** | **$ XXX** |
| **Long-term assets: Investment in equity securities..** | **4,900** |
|  |  |

**(5-10 min.) E-S-7**

***Req. 1***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Journal | | | | |
| **DATE** | | **ACCOUNT TITLES AND EXPLANATION** | **DEBIT** | **CREDIT** |
| **2019** | |  |  |  |
| **May** | **21** | **Cash (400 × $28)** | **11,200** |  |
|  |  | **Investment in Equity Securities** |  | **4,900** |
|  |  | **Gain on Sale of Equity Securities** |  | **6,300** |

***Req. 2***

This gain on sale of securities is a *realized* gain. The loss recorded at December 31, 2018, was *unrealized* because it resulted from a change in the investment’s market value, not from the sale of the investment.

**(10-15 min.) E-S-8**

***Req. 1***

***Equity* method is appropriate because the investor (Western Motors) holds a 40% investment in the investee company (Yaza Motors).**

***Req. 2***

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Journal | | | | | | | | |
|  | | **ACCOUNT TITLES AND EXPLANATION** | **DEBIT** | | **CREDIT** | | |
|  |  |  | | **Millions** | | | | |
| **a.** | | **Equity-method Investment** | | **450** | |  | |
|  |  | **Cash** | |  | | **450** | |
|  |  | **To purchase equity-method investment.** | |  | |  | |
|  |  |  | |  | |  | |
| **b.** | | **Equity-method Investment ($65 × .40)** | | **26** | |  | |
|  |  | **Equity-method Investment Revenue** | |  | | **26** | |
|  |  | **To record investment revenue.** | |  | |  | |
|  |  |  | |  | |  | |
| **c.** | | **Cash ($45 × .40)** | | **18** | |  | |
|  |  | **Equity-method Investment** | |  | | **18** | |
|  |  | **To receive cash dividend on equity-method** | |  | |  | |
|  |  | **investment.** | |  | | |  | |

***Req. 3***

|  |  |  |  |
| --- | --- | --- | --- |
| **Equity-method Investment**  ***(Amounts in millions)*** | | | |
| **Purchase** | **450** | **Dividends received** | **18** |
| **Net income** | **26** |  |  |
| **Balance** | **458** |  |  |

**(5 min.) E-S-9**

|  |  |  |
| --- | --- | --- |
|  |  | **Millions** |
|  | **Sale proceeds** | **$ 135** |
| **−** | **Carrying amount of the investment ($458 / 2)** | **(229)** |
| **=** | **(Loss) on sale of investment** | **$ (94)** |

**(10 min.) E-S-10**

**1. A *parent company* is a corporation that owns a controlling (more than 50%) interest in another company. A *subsidiary* *company* is a company that is controlled by another corporation.**

**2. *Consolidated financial statements* combine the balance sheets, income statements, statements of stockholders’ equity, and cash-flow statements of a parent company with those of its subsidiaries as if the parent and its subsidiaries were one company.**

**3. The *parent company’s name* appears on the consolidated financial statements. To consolidate, the parent company must own *more than* *50%* of the subsidiary’s stock.**

**(5-10 min.) E-S-11**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Journal | | | | |
| **DATE** | | **ACCOUNT TITLES AND EXPLANATION** | **DEBIT** | **CREDIT** |
| **2018** | |  |  |  |
| **Jan.** | **1** | **Held-to-Maturity Investment in Bonds** | **8,000** |  |
|  |  | **Cash** |  | **8,000** |
|  |  |  |  |  |
| **July** | **1** | **Cash ($8,000 × .04 × 6/12)** | **160** |  |
|  |  | **Interest Revenue** |  | **160** |
|  |  |  |  |  |

**(5-10 min.) E-S-12**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Journal | | | | |
| **DATE** | | **ACCOUNT TITLES AND EXPLANATION** | **DEBIT** | **CREDIT** |
| **2018** | |  |  |  |
| **Jan.** | **1** | **Held-to-Maturity Investment in Bonds**  **($60,000 × .85)** | **51,000** |  |
|  |  | **Cash** |  | **51,000** |
|  |  |  |  |  |
| **July** | **1** | **Cash ($60,000 × .10 × 6/12)** | **3,000** |  |
|  |  | **Interest Revenue** |  | **3,000** |
|  |  |  |  |  |

**(5-10 min.) E-S-13**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Journal | | | | |
| **DATE** | | **ACCOUNT TITLES AND EXPLANATION** | **DEBIT** | **CREDIT** |
| **2018** | |  |  |  |
| **July** | **1** | **Held-to-Maturity Investment in Bonds**  **($60,000 – $51,000)/40 interest periods)** | **225** |  |
|  |  | **Interest Revenue** |  | **225** |

**Total interest revenue = $3,000 + $225 = $3,225**

**(5-10 min.) E-S-14**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Journal | | | | |
| **DATE** | | **ACCOUNT TITLES AND EXPLANATION** | **DEBIT** | **CREDIT** |
| **2018** | |  |  |  |
| **Dec.** | **31** | **Interest Receivable ($60,000 × .10 × 6/12)** | **3,000** |  |
|  |  | **Interest Revenue** |  | **3,000** |
|  |  |  |  |  |
|  | **31** | **Held-to-Maturity Investment in Bonds**  **[($60,000 – $51,000)/40 interest periods]** | **225** |  |
|  |  | **Interest Revenue** |  | **225** |
|  |  |  |  |  |

**Balance sheet reports Held-to-Maturity Investment in Bonds of $51,450 ($51,000 + $225 + $225) as a Long-term Asset. Also, the balance sheet will include the Interest Receivable of $3,000.**

**Income statement reports Interest Revenue of $6,450 ($3,000 + $225 + $3,000 + $225).**

**(5-10 min.) E-S-15**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Journal | | | | | | |
| **DATE** | | **ACCOUNT TITLES AND EXPLANATION** | | | **DEBIT** | **CREDIT** |
| **2018** | |  | | |  |  |
| **July** | **1** | **Interest Revenue** | | | **210** |  |
|  |  | **Held-to-Maturity Investment in Bonds**  **[($50,000 × 1.042) – $50,000]/10 interest periods** | | |  | **210** |
| **July** | **1** | | **Cash ($50,000 × .07 × 6/12)** | **1,750** | |  |
|  |  | | **Interest Revenue** |  | | **1,750** |

**Total interest revenue = ($50,000 × .07 × 6/12) – $210 = $1,540**

**(5-10 min.) E-S-16**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Journal | | | | |
| **DATE** | | **ACCOUNT TITLES AND EXPLANATION** | **DEBIT** | **CREDIT** |
| **2018** | |  |  |  |
| **Dec.** | **31** | **Interest Receivable ($50,000 × .07 × 6/12)** | **1,750** |  |
|  |  | **Interest Revenue** |  | **1,750** |
|  |  |  |  |  |
|  | **31** | **Interest Revenue** | **210** |  |
|  |  | **Held-to-Maturity Investment in Bonds**  **[($50,000 × 1.042) – $50,000]/10 interest**  **periods** |  | **210** |
|  |  |  |  |  |

**Balance sheet reports Held-to-Maturity Investment in Bonds of $51,680**

**($52,100 – $210 – $210). Also interest receivable of $1,750.**

**Income statement reports Interest Revenue of $3,080 [($1,750 – $210) + ($1,750 – $210)].**

**Exercises**

**(10-15 min.) E-E-17A**

|  |  |  |  |
| --- | --- | --- | --- |
| ***Req. 1*** | | | |
| **This is a *short-term investment* because Lancaster Corporation intends to sell the stock within a short time. It is an investment in equity securities with insignificant influence because Lancaster purchased less than 5% of Knight’s outstanding shares.** | | | |
|  |  |  |  |
|  |  |  |  |
| ***Req. 2*** | | | |
| **Dec. 15** | **Investment in Equity Securities (500 × $40)** | **20,000** |  |
|  | **Cash** |  | **20,000** |
|  | **Purchased investment.** |  |  |
|  |  |  |  |
| **Dec. 31** | **Investment in Equity Securities** |  |  |
|  | **[(500 × $47) − $20,000]** | **3,500** |  |
|  | **Unrealized Gain on Equity Securities** |  | **3,500** |
|  | **Adjusted investment to market value.** |  |  |
|  |  |  |  |
|  |  |  |  |
| ***Req. 3*** | | |  |
| **BALANCE SHEET (partial)** | | |  |
| **Current assets:** | | |  |
| **Investment in equity securities** | | | **$23,500** |
|  | | |  |
| **INCOME STATEMENT (partial)** | | |  |
| **Other revenue and gains:** | | |  |
| **Unrealized gain on equity securities** | | | **$3,500** |

**(10-15 min.) E-E-18A**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Journal** | | | | |
| **DATE** | | **ACCOUNT TITLES AND EXPLANATION** | **DEBIT** | **CREDIT** |
|  |  |  |  |  |
|  | **a.** | **Investment in Equity Securities (450 × $33)** | **14,850** |  |
|  |  | **Cash** |  | **14,850** |
|  |  |  |  |  |
|  | **b.** | **Cash (450 × $1.30)** | **585** |  |
|  |  | **Dividend Revenue** |  | **585** |
|  |  |  |  |  |
|  | **c.** | **Investment in Equity Securities [450 × ($39 − $33)] 2,700** | |  |
|  |  | **Unrealized Gain on Equity Securities** |  | **2,700** |
|  |  |  |  |  |
|  | **d.** | **Cash (450 × $28)** | **12,600** |  |
|  |  | **Loss on Sale of Equity Securities** | **4,950** |  |
|  |  | **Investment in Equity Securities** |  | **17,550** |

**(15-25 min.) E-E-19A**

### Req. 1

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Stock** |  | **Cost** | | |  | **Fair Value** | | |
|  |  |  |  |  |  |  |  |  |
| **Germana-Hall** | | **(2,800 × $35.00)** | **=** | **$ 98,000** |  | **(2,800 × $28.13)** | **=** | **$ 78,764** |
|  | |  |  |  |  |  |  |  |
| **Barlengo** | | **(590 × $45.50)** | **=** | **26,845** |  | **(590 × $48.00)** | **=** | **28,320** |
|  | |  |  |  |  |  |  |  |
| **Frumley** | | **(1,000 × $70.00)** | **=** | **70,000** |  | **(1,000 × $63.25)** | **=** | **63,250** |
|  | |  |  |  |  |  |  |  |
| **Total** | | | | **$194,845** |  |  | | **$170,334** |

### Req. 2

|  |  |  |  |
| --- | --- | --- | --- |
| **Dec. 31** | **Unrealized Loss on Equity Securities** |  |  |
|  | **($194,845 − $170,334)** | **24,511** |  |
|  | **Investment in Equity Securities…..** |  | **24,511** |

### Req. 3

|  |  |
| --- | --- |
| ***Income* *Statement* (partial):** |  |
|  |  |
| **Other revenues and expenses:** |  |
| **Unrealized loss on equity securities** | **$(24,511)** |
|  |  |
| ***Balance Sheet* (partial):** |  |
|  |  |
| **ASSETS**  **Long-term assets:** |  |
| **Investment in equity securities** | **$170,334** |
|  |  |

**(10-15 min.) E-E-20A**

### Req. 1

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Journal** | | | | |
| **DATE** | | **ACCOUNT TITLES AND EXPLANATION** | **DEBIT** | **CREDIT** |
|  |  |  |  |  |
|  | **a.** | **Equity-method Investment** | **1,600,000** |  |
|  |  | **Cash** |  | **1,600,000** |
|  |  | **Purchased equity-method investment.** |  |  |
|  |  |  |  |  |
|  | **b.** | **Equity-method Investment ($620,000 × .25).** | **155,000** |  |
|  |  | **Equity-method Investment Revenue** |  | **155,000** |
|  |  | **To record investment revenue.** |  |  |
|  |  |  |  |  |
|  | **c.** | **Cash ($480,000 × .25)** | **120,000** |  |
|  |  | **Equity-method Investment** |  | **120,000** |
|  |  | **To receive cash dividend on equity-method investment.** | | |

### Req. 2

**Ending balance in the investment account:**

**$1,635,000 ($1,600,000 + $155,000 − $120,000)**

**(10-15 min.) E-E-21A**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Equity-method Investment** | | | | | |
| **a.** | **Purchase** | **1,600,000** | **c.** | **Dividends** | **120,000** |
| **b.** | **Net income** | **155,000** |  |  |  |
| **Balance** | | **1,635,000** |  |  |  |

|  |  |
| --- | --- |
| **Carrying amount of investment** | **$1,635,000** |
| **Proceeds from sale of investment** | **(1,600,000)** |
| **Loss on sale of investment** | **$ (35,000)** |

**(15-20 min.) E-E-22A**

***Req. 1***

**The *equity method* is appropriate for a 30% investment in another company’s common stock. Equity method is used for 20-50% investments.**

***Req. 2***

|  |  |
| --- | --- |
| ***Balance sheet* (partial):** |  |
| **ASSETS**  **Long-term assets:** |  |
| **Equity-method investment** | **$629,000\*** |
|  |  |
| ***Income statement* (partial):** |  |
| **Other revenue** |  |
| Equity-method investment revenue | **$ 72,000** |

**\_\_\_\_\_**

**\*Explanation:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Equity-method Investment** | | | |
| **Cost** | **590,000** |  |  |
| **Share of net income** |  | **Share of dividends** |  |
| **($240,000 × 0.30)** | **72,000** | **($110,000 × .30)** | **33,000** |
| **Balance** | **629,000** |  |  |

**(15-20 min.) E-E-23A**

***Req. 1***

**Baytex, Inc., should use the *amortized*-*cost* method to account for the long-term investment in bonds.**

***Req. 2***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Journal | | | | |
| **DATE** | | **ACCOUNT TITLES AND EXPLANATION** | **DEBIT** | **CREDIT** |
| **2018** | |  |  |  |
| **Sept.** | **30** | **Held-to-Maturity Investment in Bonds**  **($35,000 × .98)** | **34,300** |  |
|  |  | **Cash**  **To purchase bond investment.** |  | **34,300** |
|  |  |  |  |  |
| **Dec.** | **31** | **Interest Receivable ($35,000 × .068 × 3/12)** | **595** |  |
|  |  | **Interest Revenue**  **To accrue interest revenue.** |  | **595** |
|  |  |  |  |  |
|  | **31** | **Held-to-Maturity Investment in Bonds**  **[($35,000 – $34,300) / 10 × 3/6)** | **35** |  |
|  |  | **Interest Revenue** |  | **35** |
|  |  | **To amortize discount on bond investment.** |  |  |

***Req. 3***

***Balance sheet* (partial)**

**ASSETS**

|  |  |
| --- | --- |
| **Current assets:** |  |
| **Interest receivable** | **$ 595** |
|  |  |
| **Long-term assets:**  **Held-to-maturity investment in bonds** |  |
| **($34,300 + $35)** | **$34,335** |

**(10-15 min.) E-E-24B**

|  |  |  |  |
| --- | --- | --- | --- |
| ***Req. 1*** | | | |
| **This is a *short-term investment* because Amherst Corporation intends to sell the stock within a short time. It is an investment in equity securities with insignificant influence because Amherst purchased less than 5% of Hurricane’s outstanding shares.** | | | |
|  |  |  |  |
|  |  |  |  |
| ***Req. 2*** | | | |
| **Dec. 15** | **Investment in Equity Securities (900 × $57)** | **51,300** |  |
|  | **Cash** |  | **51,300** |
|  | **Purchased investment.** |  |  |
|  |  |  |  |
| **Dec. 31** | **Investment in Equity Securities** |  |  |
|  | **[(900 × $58) − $51,300]** | **900** |  |
|  | **Unrealized Gain on Equity Securities** |  | **900** |
|  | **Adjusted investment to market value.** |  |  |
|  |  |  |  |
|  |  |  |  |
| ***Req. 3*** | | |  |
| **BALANCE SHEET (partial)** | | |  |
| **Current assets:** | | |  |
| **Investment in equity securities** | | | **$52,200** |
|  | | |  |
| **INCOME STATEMENT (partial)** | | |  |
| **Other revenue and gains:** | | |  |
| **Unrealized gain on equity securities** | | | **$900** |

**(10-15 min.) E-E-25B**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Journal** | | | | |
| **DATE** | | **ACCOUNT TITLES AND EXPLANATION** | **DEBIT** | **CREDIT** |
|  |  |  |  |  |
|  | **a.** | **Investment in Equity Securities (420 × $35)** | **14,700** |  |
|  |  | **Cash** |  | **14,700** |
|  |  |  |  |  |
|  | **b.** | **Cash (420 × $1.90)** | **798** |  |
|  |  | **Dividend Revenue** |  | **798** |
|  |  |  |  |  |
|  | **c.** | **Investment in Equity Securities [420 × ($37 − $35)] 840** | |  |
|  |  | **Unrealized Gain on Equity Securities** |  | **840** |
|  |  |  |  |  |
|  | **d.** | **Cash (420 × $24)** | **10,080** |  |
|  |  | **Loss on Sale of Equity Securities** | **5,460** |  |
|  |  | **Investment in Equity Securities** |  | **15,540** |

**(15-25 min.) E-E-26B**

### Req. 1

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Stock** |  | **Cost** | | |  | **Fair Value** | | |
|  |  |  |  |  |  |  |  |  |
| **German** | | **(3,400 × $37.00)** | **=** | **$125,800** |  | **(3,400 × $28.88)** | **=** | **$98,192** |
|  | |  |  |  |  |  |  |  |
| **British** | | **(630 × $47.00)** | **=** | **29,610** |  | **(630 × $49.00)** | **=** | **30,870** |
|  | |  |  |  |  |  |  |  |
| **Milan** | | **(1,400 × $76.00)** | **=** | **106,400** |  | **(1,400 × $69.25)** | **=** | **96,950** |
|  | |  |  |  |  |  |  |  |
| **Total** | | | | **$261,810** |  |  | | **$226,012** |

### Req. 2

|  |  |  |  |
| --- | --- | --- | --- |
| **Dec. 31** | **Unrealized Loss on Equity Securities** |  |  |
|  | **($261,810 − $226,012)** | **35,798** |  |
|  | **Investment in Equity Securities…** |  | **35,798** |

### Req. 3

|  |  |
| --- | --- |
| ***Income* *Statement* (partial):** |  |
|  |  |
| **Other revenues and expenses:** |  |
| **Unrealized (loss) on equity securities** | **$(35,798)** |
|  |  |
| ***Balance Sheet* (partial):** |  |
|  |  |
| **ASSETS**  **Long-term assets:** |  |
| **Investment in equity securities** | **$226,012** |
|  |  |

**(10-15 min.) E-E-27B**

### Req. 1

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Journal** | | | | | |
| **DATE** | | **ACCOUNT TITLES AND EXPLANATION** | | **DEBIT** | **CREDIT** |
|  |  |  | |  |  |
|  | **a.** | **Equity-method Investment** | | **1,800,000** |  |
|  |  | **Cash** |  | | **1,800,000** |
|  |  | **Purchased equity-method investment.** | |  |  |
|  |  |  | |  |  |
|  | **b.** | **Equity-method Investment ($660,000 × .30).** | | **198,000** |  |
|  |  | **Equity-method Investment Revenue** | |  | **198,000** |
|  |  | **To record investment revenue.** | |  |  |
|  |  |  | |  |  |
|  | **c.** | **Cash ($460,000 × .30)** | | **138,000** |  |
|  |  | **Equity-method Investment** | |  | **138,000** |
|  |  | **To receive cash dividend on equity-method investment.** | | | |

### Req. 2

**Ending balance in the investment account:**

**$1,860,000 ($1,800,000 + $198,000 − $138,000)**

**(10-15 min.) E-E-28B**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Equity-method Investment** | | | | | |
| **a.** | **Purchase** | **1,800,000** | **c.** | **Dividends** | **138,000** |
| **b.** | **Net income** | **198,000** |  |  |  |
| **Balance** | | **1,860,000** |  |  |  |

|  |  |
| --- | --- |
| **Carrying amount of investment** | **$1,860,000** |
| **Proceeds from sale of investment** | **(1,400,000)** |
| **Loss on sale of investment** | **$ (460,000)** |

**(15-20 min.) E-E-29B**

***Req. 1***

**The *equity method* is appropriate for a 20% investment in another company’s common stock. Equity method is used for 20-50% investments.**

***Req. 2***

|  |  |
| --- | --- |
| ***Balance sheet* (partial):** |  |
| **ASSETS**  **Long-term assets:** |  |
| **Equity-method investment** | **$561,000\*** |
|  |  |
| ***Income statement* (partial):** |  |
| **Other revenue** |  |
| Equity-method investment revenue | **$ 54,000** |

**\_\_\_\_\_**

**\*Explanation:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Equity-method Investment** | | | |
| **Cost** | **530,000** |  |  |
| **Share of net income** |  | **Share of dividends** |  |
| **($270,000 × 0.20)** | **54,000** | **($115,000 × .20)** | **23,000** |
| **Balance** | **561,000** |  |  |

**(15-20 min.) E-E-30B**

***Req. 1***

**Rittex, Inc., should use the *amortized*-*cost* method to account for the long-term investment in bonds.**

***Req. 2***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Journal | | | | |
| **DATE** | | **ACCOUNT TITLES AND EXPLANATION** | **DEBIT** | **CREDIT** |
| **2018** | |  |  |  |
| **Sept.** | **30** | **Held-to-Maturity Investment in Bonds**  **($46,000 × .97)** | **44,620** |  |
|  |  | **Cash**  **To purchase bond investment.** |  | **44,620** |
|  |  |  |  |  |
| **Dec.** | **31** | **Interest Receivable ($46,000 × .05 × 3/12)** | **575** |  |
|  |  | **Interest Revenue**  **To accrue interest revenue.** |  | **575** |
|  |  |  |  |  |
|  | **31** | **Held-to-Maturity Investment in Bonds**  **[($46,000 – $44,620) / 10 × 3/6)** | **69** |  |
|  |  | **Interest Revenue** |  | **69** |
|  |  | **To amortize discount on bond investment.** |  |  |

***Req. 3***

***Balance sheet* (partial)**

**ASSETS**

|  |  |
| --- | --- |
| **Current assets:** |  |
| **Interest receivable** | **$ 575** |
|  |  |
| **Long-term assets:**  **Held-to-maturity investment in bonds** |  |
| **($44,620 + $69)** | **$44,689** |

Quiz

|  |  |  |  |
| --- | --- | --- | --- |
| **E-Q-31** | **c** | | |
| **E-Q-32** | **c** | | |
| **E-Q-33** | **b** |  |  |
| **E-Q-34** | **a [(1,000 × $77) + (200 × $10) + (700 × $30) = $100,000]** |  |  |
| **E-Q-35** | **c [(1,000 x $2.20) + (200 x $1.70) + (700 x $1.20) = $3,380]** | | |
| **E-Q-36** | **a** | | |
| **E-Q-37** | **c** | | |
| **E-Q-38** | **a** | | |

**Problems**

**(20-30 min.) E-P-39A**

***Reqs. 1 and 2***

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Cash** | | | |  | **Investment in Equity Securities** | | | |
|  | **23,000** |  | **7,200\*** |  |  | **7,200\*** |  | **2,400+** |
|  | **420\*\*** |  |  |  |  | **4,800** |  |  |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Dividend Revenue** | | | |  | **Unrealized Loss on**  **Equity Securities** | | | |
|  |  |  | **420\*\*** |  |  | **2,400+** |  |  |

**\_\_\_\_\_**

**\*1,200 × $6 = $7,200**

**\*\*1,200 × $.35 = $420**

**+$7,200 − (1,200 × $4) = $2,400**

***Req. 2***

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Journal** | | | | | | | | |
| **DATE** | | | **ACCOUNT TITLES AND EXPLANATION** | | **DEBIT** | **CREDIT** | | |
| **2018** | | |  | |  |  | | |
| **Nov.** | **16** | **Investment in Equity Securities** | | **7,200** | | |  | |
|  |  | | **Cash (1,200 × $6)** | |  | | | **7,200** |
|  |  | | **Purchased investment.** | |  | | |  |
|  |  | |  | |  | | |  |
| **Dec.** | **16** | | **Cash (1,200 × $0.35)** | | **420** | | |  |
|  |  | | **Dividend Revenue** | |  | | | **420** |
|  |  | | **Received cash dividend.** | |  | | |  |
|  |  | |  | |  | | |  |
|  | **31** | | **Unrealized Loss on Equity Securities** | | **2,400** | | |  |
|  |  | | **Investment in Equity Securities** | |  | | |  |
|  |  | | **[$7,200 − (1,200 × $4)]** | |  | | | **2,400** |
|  |  | | **Adjusted investment to fair value.** | |  | | |  |

**(continued) E-P-39A**

***Req. 3***

**BALANCE SHEET**

**Current assets:**

**Investment in equity securities (1,200 × $4)……… $4,800**

***Req. 4***

**INCOME STATEMENT**

**Other revenue and (expense):**

**Dividend revenue $ 420**

**Unrealized loss on equity securities (2,400)**

***Req. 5***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Journal** | | | | |
| **DATE** | | **ACCOUNT TITLES AND EXPLANATION** | **DEBIT** | **CREDIT** |
| **2019** | |  |  |  |
| **Jan.** | **14** | **Cash** | **6,000** |  |
|  |  | **Investment in Equity Securities** |  | **4,800** |
|  |  | **Gain on Sale of Equity Securities** |  | **1,200** |
|  |  | **Sold investment at a gain.** |  |  |

**(20-30 min.) E-P-40A**

***Req. 1***

**Current fair value is used to account for Columbus, Inc., which is considered to be an *investment in an equity security*. Oregon Exchange Company, the investor, expects to sell the stock at its market value. Fair value is clearly relevant to the investor’s decisions about this investment.** **Oregon Exchange Company purchased less than 5% of the outstanding stock of Columbus, Inc. and, thus, has insignificant influence over Columbus. The fair value method should therefore be used.**

**Fair value is *not* used for the *equity-method investment* in Nashua Corp., because the investor holds the stock to influence the operations of the investee company, not to sell the stock.** **Oregon Exchange Company purchased 25% of the outstanding stock of Nashua Corp. and, thus, has significant influence over Nashua Corp. The equity method should therefore be used.**

**(continued) E-P-40A**

**Req. 2**

|  |  |
| --- | --- |
| ***Balance sheet:*** |  |
| ASSETS |  |
| **Total current assets** | **$ XXX** |
| **Property, plant, and equipment, net** | **XXX** |
| **Long-term assets:**  **Equity-method investment** | **452,614\*** |
| **Investment in equity securities** | **30,100** |
|  |  |
|  |  |
| ***Income statement:*** |  |
| **Income from operations** | **$ XXX** |
| **Other revenue:** |  |
| **Equity-method investment revenue ($540,000 × .25)** | **135,000** |
| **Dividend revenue (1,000 × $.33)** | **330** |
| **Unrealized (loss) on equity securities** | **(11,400)** |
| **Net income** | **XXX** |
|  |  |

**\_\_\_\_\_**

|  |  |  |  |
| --- | --- | --- | --- |
| **\*Equity-method Investment** | | | |
| **Purchase** | **340,000** |  |  |
| **Net income ($540,000 × .25)** | **135,000** | **Dividends received (18,200 × $1.23)** | **22,386** |
| **Balance** | **452,614** |  |  |

**(45-60 min.) E-P-41A**

***Req. 1***

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Journal** | | | | | | | | | | | |
| **DATE** | | | | **ACCOUNT TITLES AND EXPLANATION** | | **DEBIT** | | **CREDIT** | | | |
|  | |  | |  | |  | |  | | | |
| **Mar.** | **16** | | **Investment in Equity Securities**  **(2,700 × $12.50)** | | **33,750** | | | | |  |
|  | |  | | **Cash** | | |  | **33,750** | | | |
|  | |  | | **Purchased investment.** | | |  |  | | | |
|  | |  | |  | | |  |  | | | |
| **May** | | **21** | | **Cash (2,700 × $2.25)** | | | **6,075** |  | | | |
|  | |  | | **Dividend Revenue** | | |  | **6,075** | | | |
|  | |  | | **Received cash dividend.** | | |  |  | | | |
|  | |  | |  | | |  |  | | | |
| **Aug.** | | **17** | | **Cash** | | | **83,000** |  | | | |
|  | |  | | **Equity-method Investment in Jasmine**  **Software** | | |  | **83,000** | | | |
|  | |  | | **Received cash dividend on equity-method** | | | |  | | | |
|  | |  | | **investment.** | | |  | |  | | | |
|  | |  | |  | | |  | |  | | | |
| **Dec.** | | **31** | | **Equity-method Investment in Jasmine**  **Software ($550,000 × .27) ………………….** | | | **148,500** | |  | | | |
|  | |  | | **Equity-method Investment Revenue** | | |  | | **148,500** | | | |
|  | |  | | **To record investment revenue.** | | |  | |  | | | |
|  | |  | |  | | |  | |  | | | |
|  | | **31** | | **Investment in Equity Securities ($39,000 –**  **$33,750)……………………………………….** | | | **5,250** | |  | | | |
|  | |  | | **Unrealized Gain on Investment in Equity**  **Securities.** | | |  | | **5,250** | | | |
|  | |  | | **Adjusted investment to market value.** | | |  | |  | | | |

**(continued) E-P-41A**

***Req. 2***

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Equity-method Investment in Jasmine Software** | | | | | | | |
| **Jan.** | **1** | **Balance** | **618,000** | **Aug.** | **17** | **Dividends** | **83,000** |
| **Dec.** | **31** | **Net income** | **148,500** |  |  |  |  |
| **Dec.** | **31** | **Balance** | **683,500** |  |  |  |  |

### Req. 3

|  |  |  |
| --- | --- | --- |
| **Total current assets** | | **$ XXX** |
| **Long-term assets:**  **Investment in equity securities** | | **39,000** |
| **Equity-method investment** | | **683,500** |
|  |  | | |
|  |  | | |
|  |  | | |

**(45-60 min.) E-P-42A**

***Req. 1***

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Journal** | | | | | | |
| **DATE** | | **ACCOUNT TITLES AND EXPLANATION** | **DEBIT** | | **CREDIT** |
| **2018** | |  |  | |  |
| **Jan.** | **1** | **Held-to-Maturity Investment in Bonds** |  | |  |
|  |  | **($2,000,000 × .96)** | **1,920,000** | |  |
|  |  | **Cash** |  | | **1,920,000** |
|  |  | **To purchase bond investment.** |  | |  |
|  |  |  |  | |  |
| **July** | **1** | **Cash ($2,000,000 × .09 × 6/12)** | **90,000** | |  |
|  |  | **Interest Revenue** |  | | **90,000** |
|  |  | **To receive semiannual interest.** |  | |  |
|  |  |  |  | |  |
|  | **1** | **Held-to-Maturity Investment in Bonds**  **[($2,000,000** − **$1,920,000) / 48\*] x 6** | **10,000** | |  |
|  |  | **Interest Revenue** |  | | **10,000** |
|  |  | **To amortize discount on bond investment.** |  | |  |
| ***Req. 2*** | | | | | |
| **Oct.** | **31** | **Interest Receivable** |  | |  |
|  |  | **($2,000,000 × .09 × 4/12)** | | **60,000** |  |
|  |  | **Interest Revenue** | |  | **60,000** |
|  |  | **To accrue interest revenue.** | |  |  |
|  |  |  | |  |  |
|  | **1** | **Held-to-Maturity Investment in Bonds**  **[($2,000,000** − **$1,920,000) / 48\*] x 4** | **6,667** | |  |
|  |  | **Interest Revenue** |  | | **6,667** |
|  |  | **To amortize discount on bond investment.** |  | |  |

**\_\_\_\_\_**

**\*Amortization period: 48 months, from Jan. 1, 2018 to Jan. 1, 2022**

**(20-30 min.) E-P-43B**

***Reqs. 1 and 2***

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Cash** | | | |  | **Investment in Equity Securities** | | | |
|  | **21,000** |  | **7,800\*** |  |  | **7,800\*** |  | **2,600+** |
|  | **364\*\*** |  |  |  |  | **5,200** |  |  |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Dividend Revenue** | | | |  | **Unrealized Loss on**  **Equity Securities** | | | |
|  |  |  | **364\*\*** |  |  | **2,600+** |  |  |

**\_\_\_\_\_**

**\*1,300 × $6 = $7,800**

**\*\*1,300 × $.28 = $364**

**+$7,800 − (1,300 × $4) = $2,600**

***Req. 2***

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Journal** | | | | | | | | |
| **DATE** | | | **ACCOUNT TITLES AND EXPLANATION** | | **DEBIT** | **CREDIT** | | |
| **2018** | | |  | |  |  | | |
| **Nov.** | **17** | **Investment in Equity Securities** | | **7,800** | | |  | |
|  |  | | **Cash (1,300 × $6)** | |  | | | **7,800** |
|  |  | | **Purchased investment.** | |  | | |  |
|  |  | |  | |  | | |  |
| **Dec.** | **19** | | **Cash (1,300 × $0.28)** | | **364** | | |  |
|  |  | | **Dividend Revenue** | |  | | | **364** |
|  |  | | **Received cash dividend.** | |  | | |  |
|  |  | |  | |  | | |  |
|  | **31** | | **Unrealized Loss on Equity Securities** | | **2,600** | | |  |
|  |  | | **Investment in Equity Securities** | |  | | |  |
|  |  | | **[$7,800 − (1,300 × $4)]** | |  | | | **2,600** |
|  |  | | **Adjusted investment to fair value.** | |  | | |  |

**(continued) E-P-43B**

***Req. 3***

**BALANCE SHEET**

**Current assets:**

**Investment in equity securities (1,300 × $4)……… $5,200**

***Req. 4***

**INCOME STATEMENT**

**Other revenue and (expense):**

**Dividend revenue $ 364**

**Unrealized loss on equity securities (2,600)**

***Req. 5***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Journal** | | | | |
| **DATE** | | **ACCOUNT TITLES AND EXPLANATION** | **DEBIT** | **CREDIT** |
| **2019** | |  |  |  |
| **Jan.** | **14** | **Cash** | **6,500** |  |
|  |  | **Investment in Equity Securities** |  | **5,200** |
|  |  | **Gain on Sale of Equity Securities** |  | **1,300** |
|  |  | **Sold investment at a gain.** |  |  |

**(20-30 min.) E-P-44B**

***Req. 1***

**Current fair value is used to account for Amsterdam, Inc., which is considered to be an *investment in an equity security*. Illinois Exchange Company, the investor, expects to sell the stock at its market value. Fair value is clearly relevant to the investor’s decisions about this investment. Illinois Exchange Company purchased less than 5% of the outstanding stock of Amsterdam, Inc. and, thus, has insignificant influence over Amsterdam. The fair value method should therefore be used.**

**Fair value is *not* used for the *equity-method investment* in Exeter Corp., because the investor holds the stock to influence the operations of the investee company, not to sell the stock. Illinois Exchange Company purchased 45% of the outstanding stock of Exeter Corp. and, thus, has significant influence over Exeter Corp. The equity method should therefore be used.**

**(continued) E-P-44B**

**Req. 2**

|  |  |
| --- | --- |
| ***Balance sheet:*** |  |
| **ASSETS** |  |
| **Total current assets** | **$ XXX** |
| **Long-term assets:**  **Equity-method investment** | **575,590\*** |
| **Investment in equity securities** | **30,900** |
| **Property, plant, and equipment, net** | **XXX** |
|  |  |
|  |  |
| ***Income statement :*** | |
| **Income from operations** | **$ XXX** |
| **Other revenue:** |  |
| **Equity-method investment revenue ($580,000 × .45)….** | **261,000** |
| **Dividend revenue (1,100 × $.34)** | **374** |
| **Unrealized (loss) on investment in equity securities** | **(15,575)** |
| **Net income** | **XXX** |

**\_\_\_\_\_**

|  |  |  |  |
| --- | --- | --- | --- |
| **\*Equity-method Investment** | | | |
| **Purchase** | **340,000** |  |  |
| **Net income** |  | **Dividends received** |  |
| **($580,000 × .45)** | **261,000** | **(21,000 × $1.21)** | **25,410** |
| **Balance** | **575,590** |  |  |

**(45-60 min.) E-P-45B**

***Req. 1***

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Journal** | | | | | | | | | | | |
| **DATE** | | | | **ACCOUNT TITLES AND EXPLANATION** | | **DEBIT** | | **CREDIT** | | | |
|  | |  | |  | |  | |  | | | |
| **Mar.** | **16** | | **Investment in Equity Securities**  **(1,500 × $12.75)** | | **19,125** | | | | |  |
|  | |  | | **Cash** | | |  | **19,125** | | | |
|  | |  | | **Purchased investment.** | | |  |  | | | |
|  | |  | |  | | |  |  | | | |
| **May** | | **21** | | **Cash (1,500 × $2.50)** | | | **3,750** |  | | | |
|  | |  | | **Dividend Revenue** | | |  | **3,750** | | | |
|  | |  | | **Received cash dividend.** | | |  |  | | | |
|  | |  | |  | | |  |  | | | |
| **Aug.** | | **17** | | **Cash** | | | **88,000** |  | | | |
|  | |  | | **Equity-method Investment in Rockaway**  **Software** | | |  | **88,000** | | | |
|  | |  | | **Received cash dividend on equity-method** | | | |  | | | |
|  | |  | | **investment.** | | |  | |  | | | |
|  | |  | |  | | |  | |  | | | |
| **Dec.** | | **31** | | **Equity-method Investment in Rockaway**  **Software ($500,000 × .21) ………………….** | | | **105,000** | |  | | | |
|  | |  | | **Equity-method Investment Revenue** | | |  | | **105,000** | | | |
|  | |  | | **To record investment revenue.** | | |  | |  | | | |
|  | |  | |  | | |  | |  | | | |
|  | | **31** | | **Investment in Equity Securities ($26,100 –**  **$19,125)……………………………………….** | | | **6,975** | |  | | | |
|  | |  | | **Unrealized Gain on Investment in Equity**  **Securities.** | | |  | | **6,975** | | | |
|  | |  | | **Adjusted investment to market value.** | | |  | |  | | | |

**(continued) E-P-45B**

***Req. 2***

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Equity-method Investment in Rockaway Software** | | | | | | | |
| **Jan.** | **1** | **Balance** | **615,000** | **Aug.** | **17** | **Dividends** | **88,000** |
| **Dec.** | **31** | **Net income** | **105,000** |  |  |  |  |
| **Dec.** | **31** | **Balance** | **632,000** |  |  |  |  |

### Req. 3

|  |  |  |
| --- | --- | --- |
| **Total current assets** | | **$ XXX** |
| **Long-term assets:**  **Investment in equity securities** | | **26,100** |
| **Equity-method investment** | | **632,000** |
|  |  | | |
|  |  | | |
|  |  | | |

**(45-60 min.) E-P-46B**

***Req. 1***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Journal** | | | | | |
| **DATE** | | **ACCOUNT TITLES AND EXPLANATION** | **DEBIT** | **CREDIT** |
| **2018** | |  |  |  |
| **Jan.** | **1** | **Held-to-Maturity Investment in Bonds** |  |  |
|  |  | **($1,500,000 × .95)** | **1,425,000** |  |
|  |  | **Cash** |  | **1,425,000** |
|  |  | **To purchase bond investment.** |  |  |
|  |  |  |  |  |
| **July** | **1** | **Cash ($1,500,000 × .08 × 6/12)** | **60,000** |  |
|  |  | **Interest Revenue** |  | **60,000** |
|  |  | **To receive semiannual interest.** |  |  |
|  |  |  |  |  |
|  | **1** | **Held-to-Maturity Investment in Bonds**  **[($1,500,000** − **$1,425,000) / 48\*] x 6** | **9,375** |  |
|  |  | **Interest Revenue** |  | **9,375** |
|  |  | **To amortize discount on bond investment.** |  |  |
| ***Req. 2*** | | | | |
| **Oct.** | **31** | **Interest Receivable** |  |  |
|  |  | **($1,500,000 × .08 × 4/12)** | **40,000** |  |
|  |  | **Interest Revenue** |  | **40,000** |
|  |  | **To accrue interest revenue.** |  |  |
|  |  |  |  |  |
|  | **1** | **Held-to-Maturity Investment in Bonds**  **[($1,500,000** − **$1,425,000) / 48\*] x 4** | **6,250** |  |
|  |  | **Interest Revenue** |  | **6,250** |
|  |  | **To amortize discount on bond investment.** |  |  |

**\_\_\_\_\_**

**\*Amortization period: 48 months, from Jan. 1, 2018 to Jan. 1, 2022**

**Decision Case**

**(20-30 min.) E-C-47**

**1. The Ohio Office Systems investment cannot be used to generate the needed income because the appropriate way to account for this investment is the equity method. Under the equity method, Barham records dividends received not as income, but as a decrease in the investment carrying amount.**

**2. The bond investment cannot be used to generate the needed income because a sale of the bonds would increase net income by only $6,200, computed as follows:**

|  |  |
| --- | --- |
| **Sale price of the bond investment…………………..** | **$380,000** |
| **Less: Commission to sell ($380,000 × .01)………** | **(3,800)** |
| **Amortized carrying amount of the** |  |
| **bond investment** |  |
| **[$250,000 + ($400,000 − $250,000) × 8/10]** | **(370,000)** |
| **Gain on sale of the bond investment………………..** | **$ 6,200** |

**3. The Microsoft stock can be used to generate the needed income, as follows:**

|  |  |
| --- | --- |
| **Sale price of the investment in Microsoft stock** |  |
| **(5,000 × $73)…………………………………………** | **$365,000** |
| **Less: Carrying value of the Microsoft stock** |  |
| **(5,000 × $54)…………………………………………** | **270,000** |
| **Gain on sale of the Microsoft stock………………..** | **$ 95,000** |

***Recommendation:* Sell the Microsoft stock.**