**SOLUTIONS TO GRADED PROBLEMS APE-1, APOE-3, APE-6, AND AP12-1**

**APE–1.**

**Req. 1**

When the bonds were purchased, the company increased Held-to-Maturity Investments and decreased Cash.

**Req. 2**

When interest was received on the investments, Cash increased (based on the stated rate) and Interest Revenue increased (based on the effective rate). The bonds were purchased at a premium, so the Held-to-Maturity Investments account was decreased for the difference between the cash received and the interest revenue recorded.

**Req. 3**

No journal entry is required. A decrease in the fair value of bonds in the held-to-maturity portfolio is not recorded.

**APE–3.**

**Req. 1**

The fair value method of accounting for long-term investments must be used in this situation because 6% of the outstanding voting stock of Square Corporation is owned (12,000 shares ÷ 200,000 shares outstanding). The fair value method must be used when less than 20% of the outstanding stock is owned because the investor company cannot exercise significant influence or control.

**Req. 2**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| a. | Acquisition: | **2014** | | |  | **2015** | | |
|  | Investments in AFS securities (+A) | 300,000 |  |  |  |  |  |  |
|  | Cash (– A) |  |  | 300,000 |  |  |  |  |
|  | (12,000 shares x $25 per share) |  |  |  |  |  |  |  |

b. Income reported by Square Corporation:  
Revenue should not be recognized by the company on the basis of Square Corp. income in either 2014 or 2015 because, under the fair value method, revenue is not recognized until dividends are declared.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| c. | Dividends received: |  |  |  |  |  |  |  |
|  | Cash (+A) | 3,600 |  |  |  | 4,800 |  |  |
|  | Dividend revenue (+R, +SE) |  |  | 3,600 |  |  |  | 4,800 |
|  | 2014: $60,000 x 6% = $3,600 |  |  |  |  |  |  |  |
|  | 2015: $80,000 x 6% = $4,800 |  |  |  |  |  |  |  |
| d. | Fair value effects: |  |  |  |  |  |  |  |
|  | Investments in AFS securities (+ A) | 36,000 |  |  |  |  |  |  |
|  | Net unrealized gains (losses) (+OCI,   + SE) |  |  | 36,000 |  |  |  |  |
|  | Net unrealized gains (losses) (–OCI,– SE) |  |  |  |  | 12,000 |  |  |
|  | Investments in AFS securities (–A) |  |  |  |  |  |  | 12,000 |

Computations for Year-End Adjustments to Market:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Year | Fair Value | − | Book Value before Adjustment | = | Amount for Adjusting Entry |
| 2014 | $336,000  ($28 x 12,000 shares) | − | $300,000 | = | +$36,000 |
| 2015 | 324,000  ($27 x 12,000 shares) | − | 336,000  (from prior fair value) | = | −12,000 |

**Req. 3**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | **2014** |  | **2015** |
| a. | Balance sheet: |  |  |  |
|  | Long-term Investments: |  |  |  |
|  | Investments in AFS securities (at fair value) | $336,000 |  | $324,000 |
| b. | Stockholders’ Equity: |  |  |  |
|  | Other comprehensive income: |  |  |  |
|  | Net unrealized gains (losses) | 36,000 |  | 24,000 |
| c. | Income Statement: |  |  |  |
|  | Dividend revenue | 3,600 |  | 4,800 |

**APE–6.**

**Req. 1**

Purchase price for the net assets $140,000

Fair value of net assets acquired\* 110,000

Goodwill purchased $ 30,000

\*($12,000 inventory + $180,000 property and equipment – $82,000 liabilities)

**Req. 2**

|  |  |  |  |
| --- | --- | --- | --- |
| Inventory (+A) | 12,000 |  |  |
| Property and equipment (+A) | 180,000 |  |  |
| Goodwill (+A) | 30,000 |  |  |
| Liabilities (not detailed) (+L) |  |  | 82,000 |
| Cash (–A) |  |  | 140,000 |

**AP12–1.**

**Req. 1**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Related Cash | **Balance sheet at December 31** | |  |  |  |  |
| Flow Section |  | **2015** | **2014** | **Change** | |  |
| Δ in Cash | Cash | $34,000 | $29,000 | +5,000 | 10 | Net increase in cash |
| O | Accounts receivable | 45,000 | 28,000 | +17,000 | 3 | Subtract from net income the increase in A/R |
| O | Merchandise inventory | 32,000 | 38,000 | –6,000 | 4 | Add to net income the decrease in Inventory |
| I | Property and equipment | 121,000 | 100,000 | +21,000 | 7 | Payment in cash for equipment |
| O | Less: Accumulated depreciation | (30,000) | (25,000) | –5,000 | 2 | Add back to NI because depreciation expense does not affect cash |
|  |  | $202,000 | $170,000 |  |  |  |
| O | Accounts payable | $36,000 | $27,000 | +9,000 | 5 | Add to net income the increase in Accounts payable |
| O | Wages payable | 2,200 | 1,400 | +800 | 6 | Add to net income the increase in Wages payable |
| F | Note payable, long-term | 40,000 | 46,000 | –6,000 | 8 | Cash used for repayment of note principal |
| F | Contributed capital | 86,600 | 70,600 | +16,000 | 9 | Issuance of stock for cash |
| O,F | Retained earnings | 37,200 | 25,000 | +12,200 | 1 | Increased for net income of $27,200 and decreased for dividends declared and paid of $15,000 |
|  |  | $202,000 | $170,000 |  |  |  |
|  |  |  |  |  |  |  |
|  | **Income statement for 2015** | |  |  |  |  |
|  | Sales | $135,000 |  |  |  |  |
|  | Cost of goods sold | 70,000 |  |  |  |  |
|  | Other expenses | 37,800 |  |  |  |  |
|  | Net Income | $ 27,200 |  | |  |  |

**AP12–1.(continued)**

|  |  |  |  |
| --- | --- | --- | --- |
| Ingersol Construction Supply Company | | | |
| Statement of Cash Flows | | | |
| For the Year Ended December 31, 2015 | | | |
|  |  |  |  |
| **Cash flows from operating activities:** |  |  |  |
| Net income |  |  | $27,200  1 |
| Adjustments to reconcile net income to net cash provided by operating activities: |  |  |  |
| Depreciation expense | $ 5,000 | 2 |  |
| Increase in accounts receivable | (17,000) | 3 |  |
| Decrease in merchandise inventory | 6,000 | 4 |  |
| Increase in accounts payable | 9,000 | 5 |  |
| Increase in wages payable | 800 | 6 | 3,800 |
| Net cash provided by operating activities |  |  | 31,000 |
| **Cash flows from investing activities:** |  |  |  |
| Cash payments to purchase fixed assets |  |  | (21,000) 7 |
| **Cash flows from financing activities:** |  |  |  |
| Cash payments for dividends | (15,000) | 1 |  |
| Cash payments on long-term note | (6,000) | 8 |  |
| Cash receipts from issuing stock | 16,000 | 9 |  |
| Net cash provided by financing activities |  |  | (5,000) |
| Net increase in cash during the year |  |  | 5,00010 |
| Cash balance, January 1, 2015 |  |  | 29,000 |
| Cash balance, December 31, 2015 |  |  | $34,000 |

**Req. 2**

There was an increase in cash for Ingersol Construction Supply Company this year of $5,000. Operating activities provided a positive cash flow of $31,000. This inflow of cash from operating activities, combined with the stock issuance for $16,000 cash, allowed the company to invest $21,000 in fixed assets, pay down a long-term note by $6,000, and pay dividends of $15,000.