

Chapter 7 Long-term Investment in Bond

$$\begin{aligned}
 4. \quad PV &= 40,000(0.6756) + 2,000(8.1109) \\
 &= 43,245.80
 \end{aligned}$$

| Period | BV | Im = 4% | I = 5% | Premium |
|--------------|-----------|------------------|---------------|-----------------|
| 1 | 43,245.80 | 1,729.83 | 2,000 | 270.17 |
| 2 | 42,975.63 | 1,719.03 | 2,000 | 280.97 |
| 3 | 42,694.66 | 1,707.79 | 2,000 | 292.21 |
| 4 | 42,402.45 | 1,696.10 | 2,000 | 303.90 |
| 5 | 42,098.55 | 1,683.94 | 2,000 | 316.06 |
| 6 | 41,782.49 | 1,671.30 | 2,000 | 328.70 |
| 7 | 41,453.79 | 1,658.15 | 2,000 | 341.85 |
| 8 | 41,111.94 | 1,644.48 | 2,000 | 355.52 |
| 9 | 40,756.42 | 1,630.26 | 2,000 | 369.74 |
| 10 | 40,386.68 | 1,613.32 | 2,000 | 386.68 |
| Total | | 16,754.20 | 20,000 | 3,245.80 |

6.

| | Description | Debit | Credit |
|-----|---|----------|-----------|
| 6.1 | Cash | 2,000 | |
| | Interest Revenue | | 2,000 |
| | Interest Revenue | 316.06 | |
| | Hold-to-Maturity-Bond | | 316.06 |
| 6.2 | Accrued Interest Revenue | 1,333.33 | |
| | Interest Revenue | | 1,333.33 |
| | Interest Revenue | 219.13 | |
| | Hold-to-Maturity-Bond | | 219.13 |
| 6.3 | <u>Balance Sheet 25x4</u> Hold-to-Maturity-Bond = 41,563.36 ← (41,782.49 – 219.13) | | |
| 6.4 | Cash | 24,800 | |
| | Available-for-sales-Bond | | 20,726.90 |
| | Gain on Sales | | 4,073.10 |
| | Hold-to-Maturity-Bond | 23,000 | |
| | Available-for-sales-Bond | | 20,726.90 |
| | Unrealized Gain | | 2,273.10 |
| | | | |
| | | | |

| | Description | Debit | Credit |
|-----|--------------------------------------|----------|-----------|
| 6.5 | Available-for-sales-Common Stock | 48,000 | |
| | Hold-to-Maturity-Bond | | 41,563.36 |
| | Gain from Conversion | | 6,436.64 |
| 6.6 | a) Hold-to-Maturity-Bond → 40,756.42 | | |
| | b) Available-for-sales-Bond → 39,000 | | |
| | c) | | |
| | Unrealized Loss | 1,756.42 | |
| | Available-for-sales-Bond | | 1,756.42 |
| 6.7 | a) | | |
| | Cash | 44,000 | |
| | Hold-to-Maturity-Bond | | 40,756.42 |
| | Gain on Sales | | 3,243.58 |
| | b) | | |
| | Cash | 44,000 | |
| | Available-for-sales-Bond | | 39,000 |
| | Unrealized Loss | | 1,756.42 |
| | Gain on Sales | | 3,243.58 |

8. 1) Accelerated Amortization

| Period | Redemption Date | BV | Premium | Premium/year |
|--------|-----------------|--------|---------|--------------|
| | Jan 1, 2535 | 11,200 | 500 (5) | 100 |
| 1 | Jan 1, 2540 | 10,700 | 400 (3) | 133.33 |
| 2 | Jan 1, 2543 | 10,300 | 200 (4) | 50 |
| 3 | Jan 1, 2547 | 10,100 | 100 (3) | 33.33 |
| | Jan 1, 2550 | 10,000 | | |

2) Straight-line Method

$$= 1,200 / 15$$

$$= 80 / \text{year}$$

| Accelerated | | Straight-line | |
|----------------------------------|--------|----------------------------------|--------|
| <u>Dr.</u> Cash | 10,300 | <u>Dr.</u> Cash | 10,300 |
| <u>Cr.</u> Hold-to-Maturity-Bond | 10,300 | Loss from Redemption | 260 |
| | | <u>Cr.</u> Hold-to-Maturity-Bond | 10,560 |

10. a)

Case 1

| | |
|-------------------------------------|-----------|
| <u>Dr.</u> Available-for-sales-Bond | 1,500,000 |
| Warrant | 500,000 |
| <u>Cr.</u> Cash | 2,000,000 |

Case 2

| | |
|-------------------------------------|-----------|
| <u>Dr.</u> Available-for-sales-Bond | 1,400,000 |
| Warrant | 600,000 |
| <u>Cr.</u> Cash | 2,000,000 |

Case 3

| | |
|-------------------------------------|-----------|
| <u>Dr.</u> Available-for-sales-Bond | 1,900,000 |
| Warrant | 100,000 |
| <u>Cr.</u> Cash | 2,000,000 |

b)

| | |
|---|---------|
| <u>Dr.</u> Available-for-sales-Common Stock | 400,000 |
| <u>Cr.</u> Warrant | 250,000 |
| Cash | 150,000 |