

### Chapter 3 and 4 (In Class Portion)

This portion of the exam counts for 40 points. Question 1 is worth 15 points. Question 2 is worth 25 points.

1. Given the following balance sheets for Silver Birch Sports answer the next five questions. Net income for the year 20X5 was \$7 million. It paid out \$5 million in dividends. All numbers are in millions.

**Silver Birch Sports Shop**  
**December 31 Balance Sheets**  
**(\$ in millions)**

|                              | <b>20X4</b>  | <b>20X5</b>  |
|------------------------------|--------------|--------------|
| Cash                         | \$8          | \$13         |
| Accounts Receivable          | 31           | 38           |
| Inventory                    | <u>21</u>    | 25           |
| Total Current Assets         | \$60         | \$76         |
| <br>                         |              |              |
| Gross Plant and Equipment    | \$147        | \$185        |
| Less Depreciation            | <u>40</u>    | <u>50</u>    |
| Net Plant and Equipment      | 107          | \$135        |
| <br>                         |              |              |
| <u>Total Assets</u>          | <u>\$167</u> | <u>\$211</u> |
| <br>                         |              |              |
| Accounts Payable             | \$12         | 15           |
| Accrued Wages and Taxes      | <u>3</u>     | 8            |
|                              | \$15         | \$23         |
| <br>                         |              |              |
| Long Term Debt               | 64           | 73           |
| Common Stock                 | 15           | 40           |
| Retained Earnings            | <u>73</u>    | <u>75</u>    |
| <br>                         |              |              |
| Total Liabilities and Equity | <u>\$167</u> | <u>\$211</u> |

1. What is Silver Birch's cash flow from operations?
2. What is Silver Birch's cash flow from investing activities?
3. What is Silver Birch's cash flow from financing activities?
4. What is Silver Birch's net cash flow?
5. What is Silver Birch's return on equity?

2. Key Graphics expects to finish the current year with the financial results indicated on the worksheet given below. Develop next year's income statement and ending balance sheet using that information and the following planning assumptions and facts. Note that due to an economic slowdown, Key Graphics is expecting a ten percent reduction in revenue. It is attempting to cut expenditures by an even greater percentage, resulting in a larger net profit. Work to the nearest thousand dollars.

## **PLANNING ASSUMPTIONS AND FACTS**

### **Income Statement Items**

1. Revenue declines by 10%.
2. The cost ratio will improve by 3%.
3. Spending in the Marketing Department will be held to 22% of revenue.
4. Engineering and Overhead expenses will be cut by 15%.
5. The combined state and federal income tax rate will be 40%
6. Interest on all borrowing will be 9 percent.
7. Interest expenses are based on  $\frac{1}{2}$  of the prior year's long-term debt and  $\frac{1}{2}$  of the current year's long-term debt.)

### **Balance Sheet Items**

1. Cash balances will remain constant.
2. The ACP will be 30 days. (Use ending balances.)
3. The inventory turnover ratio will be 4 times. (Use ending balances.)
4. Capital spending is expected to be \$6.0M. The average depreciation life of the assets to be acquired is 5 years and straight-line depreciation is used. Old assets will depreciation by \$1,700,000.
5. Accounts payable is expected to be 40% of inventory.
6. Accruals will rise by \$10,000
7. \$1,500,000 of dividends will be paid.
8. There are no stock splits.

See next page for financial statements.

### Key Graphics

#### Income Statement

(\$000)

|                          | THIS<br>\$   | YEAR<br>%   | NEXT<br>\$ | YEAR<br>% |
|--------------------------|--------------|-------------|------------|-----------|
| Revenues                 | \$18,000     | 100.0       | \$16,200   | 100.0     |
| Less: Cost of Goods Sold | <u>7,500</u> | <u>42.0</u> |            |           |
| Gross Margin             | \$10,440     | 58.0        |            |           |
| Expenses                 |              |             |            |           |
| Marketing                | \$4,100      | 22.8        |            |           |
| Engineering              | 1,400        | 7.8         |            |           |
| Overhead                 | <u>1,500</u> | <u>8.3</u>  |            |           |
| Total Expenses           | 7,000        | 38.9        |            |           |
| EBIT                     | \$3,440      | 19.1        |            |           |
| Less: Interest Expense   | <u>500</u>   | <u>2.8</u>  |            |           |
| EBT                      | \$2,940      | 16.3        |            |           |
| Less: Income Tax         | <u>1,176</u> | <u>6.5</u>  |            |           |
| EAT                      | \$1,764      | 9.8         |            |           |

### Key Graphics

#### Balance Sheet

(\$000)

| ASSETS             |                 | LIABILITIES AND EQUITY |                     |                 |
|--------------------|-----------------|------------------------|---------------------|-----------------|
|                    | This Year       | Next Year              | This Year           | Next Year       |
| Cash               | \$1,200         |                        | Accounts Payable    | \$400           |
| Accts, Receivable  | 2,000           |                        | Accruals            | <u>180</u>      |
| Inventory          | <u>2,400</u>    |                        | Current Liabilities | \$580           |
| Current Assets     | \$5,600         |                        |                     |                 |
| Gross Fixed Assets | \$13,000        |                        | Long-Term Debt      | \$4,575         |
| Less: Acc. Deprec. | <u>4,800</u>    |                        | Equity              | <u>8,645</u>    |
| Net Fixed Assets   | \$8,200         |                        | Total Capital       | \$13,220        |
| Total Assets       | <u>\$13,800</u> |                        | Total Liab.& Equity | <u>\$13,800</u> |