

Suggested Solution
Mid-term Examination
Winter 2012

Question 1 (18 marks) *Multiple-choice* (1.5 marks per correct answer)

1. c
2. b $\text{Change in Equity} = (\$150,000 - \$104,000) - (\$60,000 - \$40,000) = \$26,000$
Change in Equity = Profit – Dividends; $\$26,000 = P - \$10,000$; $P = \$36,000$
3. a
4. c
5. c $\text{COS} = [\$10,000 + (41,000 - 800 - 1,200)] - 8,000 = \$41,000$
 $\text{NS} = \$98,000 - 2,000 = \$96,000$; $\text{GP} = \text{NS} - \text{COS} = \$96,000 - 41,000 = \$55,000$
 $\text{GP}\% = \$55,000 / \$96,000 = 57.3\%$
6. d
7. b
8. c
9. c
10. a
11. d
12. b $\text{Balance at Jan. 31} = \$8,000 + 50,000 - 54,000 = \$4,000$

Question 2 (17 marks)

Req.1 (12.5 marks)

| | | | |
|-------|---------------|--------|--------|
| Oct 2 | Cash | 10,000 | |
| | Equipment | 5,000 | |
| | Share capital | | 15,000 |
| Oct 7 | Equipment | 20,000 | |
| | Cash | | 10,000 |
| | Note payable | | 10,000 |

| | | | |
|--------|---|--------|--------|
| Nov 15 | Trade receivables | 10,000 | |
| | Sales revenue | | 10,000 |
| | Cost of sales (or Cost of goods sold) | 7,500 | |
| | Inventory | | 7,500 |
| Nov 18 | Sales returns and allowances | 1,000 | |
| | Trade receivables | | 1,000 |
| | Inventory [$\$7,500 \times (1,000/10,000)$] | 750 | |
| | Cost of sales (or Cost of goods sold) | | 750 |
| Nov 20 | No entry because there is no transaction. | | |
| Nov 22 | Cash | 8,820 | |
| | Sales discounts [$(\$10,000 - 1,000) \times 2\%$] | 180 | |
| | Trade receivables | | 9,000 |
| Dec 1 | Prepayments (or Prepaid rent) | 18,000 | |
| | Cash | | 18,000 |
| Dec 20 | Cash | 20,000 | |
| | Deferred revenue | | 20,000 |
| Dec 24 | Salaries expense | 6,000 | |
| | Cash | | 6,000 |

Req.2 (4.5 marks)

| | | | |
|--------|--|-------|-------|
| Dec 31 | Rent expense [$\$18,000 / 12$ months] | 1,500 | |
| | Prepayments (or Prepaid rent) | | 1,500 |
| | Deferred revenue [$\$20,000 \times 40\%$] | 8,000 | |
| | Service revenue | | 8,000 |
| | Salaries expense [$\$6,000 / 2$ weeks] | 3,000 | |
| | Salaries payable | | 3,000 |
| | Employees worked for six days, from December 26 to December 31 inclusive, and were not paid. | | |

An amount of \$2,500 is also acceptable if one considers December 26 (boxing day) as a holiday.

Question 3 (26 marks)**Req. 1** Adjusting journal entries, December 31, 2011 (9 marks)

| | | | |
|----|---|--------|--------|
| a) | Interest receivable | 750 | |
| | Interest income (or revenue) | | 750 |
| | (60,000 x 5% x 3/12) | | |
| b) | Interest expense | 100 | |
| | Interest payable | | 100 |
| | (30,000 x 4% x 1/12) | | |
| c) | Deferred rent revenue | 4,000 | |
| | Rent revenue | | 4,000 |
| | (\$6,000 / 3) x 2 | | |
| d) | Depreciation expense | 15,625 | |
| | Accumulated depreciation - equipment | | 15,625 |
| | (\$140,625 / 9 years, 2002 - 2010) | | |
| e) | Retained earnings (or Dividends declared) | 60,000 | |
| | Dividend payable | | 60,000 |
| | (100,000 shares x \$0.60) | | |
| f) | Income tax expense | 74,700 | |
| | Income taxes payable | | 74,700 |
| | (\$249,000 x 30% – see below) | | |

Req. 2 (7 marks)

Charmar Inc.
Income Statement
For the year ended December 31, 2011

| | | |
|------------------------------------|------------------|---------------------|
| Sales revenue | \$999,000 | |
| Less: Sales returns and allowances | <u>12,000</u> | |
| Net sales | 987,000 | |
| Cost of goods sold | <u>490,000</u> | |
| Gross Profit | <u>497,000</u> | |
| Operating expenses: | | |
| Salaries expense | 222,000 | |
| Depreciation expense | 15,625 | |
| Other operating expenses | <u>15,025</u> | |
| Total operating expenses | <u>252,650</u> | |
| Operating profit | 244,350 | |
| Other income (expense): | | |
| Rent revenue | 4,000 | |
| Interest income | 750 | |
| Interest expense | <u>(100)</u> | |
| Profit before income taxes | 249,000 | |
| Income tax expense | <u>74,700</u> | (249,000 x 30%) |
| Profit | <u>\$174,300</u> | |
| Earnings per share (EPS) | \$1.74 | (174,300 / 100,000) |

Req. 3 (6 marks)

Charmar Inc.
Statement of Financial Position (partial)
As at December 31, 2011

Liabilities and Shareholders' Equity

Current Liabilities

| | | |
|---------------------------------|----------------|-----------------|
| Trade payables | \$ 70,400 | |
| Dividends payable | 60,000 | |
| Income taxes payable | 74,700 | |
| Note payable, December 31, 2012 | 30,000 | |
| Interest payable | 100 | |
| Deferred rent revenue | <u>2,000</u> | (6,000 – 4,000) |
| Total Current Liabilities | <u>237,200</u> | |

Shareholders' Equity

| | | |
|--|--------------------|------------------------------|
| Common shares (100,000 shares) | 620,000 | |
| Retained Earnings | <u>279,300</u> | (165,000 + 174,300 – 60,000) |
| Total Shareholders' Equity | <u>899,300</u> | |
| Total Liabilities and Shareholders' Equity | <u>\$1,136,500</u> | |

Req. 4: (4 marks) Selected financial ratios

- a. Profit margin ratio = Profit / Net sales = \$174,300 / \$987,000 = 17.7%.

This ratio measures how much profit has been earned from every sales dollar generated during the period, after covering all expenses (including income taxes).

- b. Return on equity = Profit / Average Shareholders' Equity = \$174,300 / \$842,150* = 20.7%

$$* (\$620,000 + 165,000 + 899,300) / 2 = \$842,150$$

This ratio indicates how much the firm earned for each dollar of investment by shareholders.

Question 4 (20 marks)Req. 1 (6 marks)

| | | | |
|---------|---------------------------------|-------|-------|
| Oct. 8 | Allowance for doubtful accounts | 1,500 | |
| | Trade receivables | | 1,500 |
| Nov. 5 | Cash | 7,350 | |
| | Sales discounts | 150 | |
| | Trade receivables | | 7,500 |
| Nov. 16 | Cash | 4,000 | |
| | Sales returns and allowance | 1,000 | |
| | Trade receivables | | 5,000 |
| Dec. 20 | Trade receivables | 500 | |
| | Allowance for doubtful accounts | | 500 |
| | Cash | 500 | |
| | Trade receivables | | 500 |

Req. 2 (6 marks)

| Age Group | Amount Receivable | Estimated Percent Uncollectible | Estimated Amount Uncollectible |
|----------------------------|------------------------------|---------------------------------------|--------------------------------------|
| Not yet due | \$0 | 1% | \$ 0 |
| 1-30 days past due | $\$10,000 - 6,000 = \$4,000$ | 5% | 200 |
| 31-60 days past due | 0 | 10% | 0 |
| More than 60 days past due | $\$9,500 - 1,500 = \$8,000$ | 15% | 1,200 |
| Total | <u>\$12,000</u> | | <u>\$1,400</u> |

Ending balance of Allowance for Doubtful Accounts (at the end of 2011) is \$1,400.

Bad debt expense (for the year of 2011) = $\$1,400 - (1,300 + 500 - 1,500) = \$1,100$.

| | | | |
|---------|---------------------------------|-------|-------|
| Dec. 31 | Bad debt expense | 1,100 | |
| | Allowance for doubtful accounts | | 1,100 |

Req. 3 (5 marks)

Wolverine Inc.
Statement of Financial Position (partial)
December 31, 2011

Current assets:

:

| | |
|---------------------------------------|-----------------|
| Trade receivables | \$12,000 |
| Less: Allowance for doubtful accounts | <u>1,503</u> |
| Net realizable value | <u>\$10,497</u> |

Calculations:

$$\begin{aligned} \text{Net sales (for the year of 2011)} &= \$100,000 + (5,000 + 7,500 + 10,000) - (150 + 1,000 + 1,000) \\ &= \$120,350 \end{aligned}$$

$$\text{Bad debt expense (for the year of 2011)} = \$120,350 \times 1\% = \$1,203 \text{ (rounded), or } \$1,204$$

$$\text{Allowance for doubtful accounts, Dec. 31} = (\$1,300 + 500 - 1,500) + 1,203 = \$1,503$$

Req. 4 (3 marks)

$$\text{Gross Profit Percentage} = (\$120,350 - 60,000) / 120,350 = 50.15\%.$$

In general, the *Gross Profit Percentage* measures how much gross profit is generated from every sales dollar. From 2009 to 2011, Wolverine's *Gross Profit Percentage* increased. Therefore, Wolverine appears to have enhanced its ability to charge premium prices and/or produce goods at low cost.