

SUGGESTED SOLUTION
FINAL EXAMINATION

Fall 2009

Question 1 (21 marks) *Multiple-choice*

(1.5 marks per correct answer)

1. b
2. a
3. c
4. b
5. a
6. a
7. d
8. a
9. c
10. d
11. d
12. c
13. c
14. c

Question 2 (16 marks)

Req. 1

Total market value of two machines = \$240,000 + \$160,000 = \$400,000

Allocation of the purchase price:

Machine A \$350,000 x (240,000/400,000) = \$210,000

Machine B \$350,000 x (160,000/400,000) = \$140,000

Req. 2

Equipment/Machinery (\$350,000 + \$2,000 + \$1,000)	353,000
Cash (\$353,000 – \$250,000)	103,000
Notes payable	250,000

Req. 3

Amortization of Machine A– 2009 = (\$212,000 – 0) x 2/10 = \$42,400

Amortization of Machine A– 2010 = (\$212,000 – 42,400) x 2/10 = \$33,920

Req. 4

Amortization rate per unit for Machine B = (\$140,000 + \$1,000 – \$6,000) / 100,000
= \$1.35

Accumulated amortization at September 30, 2009 = \$1.35 x 9,000 units
= \$12,150

Net book value at September 30, 2009 = \$141,000 – 12,150 = \$128,850

Loss on sale of equipment = \$128,850 – \$125,000 = \$3850

Amortization Expense	12,150
Accumulated amortization	12,150

Cash	125,000
Accumulated amortization	12,150
Loss on sale of equipment	3,850
Equipment	141,000

Question 3 (21 marks)

RT Ltd.
Cash Flow Statement
For the Year ended December 31, 2009

Operating activities		
Net income	\$1,110,000	
Add (deduct) items not affecting cash :		
Amortization expense	90,000	
Gain on disposal of capital assets	(60,000)	
Increase in accounts receivable	(30,000)	
Decrease in merchandise inventory	15,000	
Decrease in prepaid expenses	2,000	
Increase in accounts payable	8,000	
Decrease in income taxes payable	<u>(16,000)</u>	
Cash from operating activities		\$1,119,000
Investing activities		
Acquisition of capital assets	(950,000)	
Disposal of capital assets (Note 1)	<u>88,000</u>	
Cash used in investing activities		(862,000)
Financing activities		
Repayment of note payable	(60,000)	
Proceeds from issuance of common shares	60,000	
Payment of dividends (Note 2)	<u>(350,000)</u>	
Cash used in financing activities		<u>(350,000)</u>
Decrease in cash during 2009		(93,000)
Cash balance, December 31, 2008		<u>113,000</u>
Cash balance, December 31, 2009		<u>\$20,000</u>

Note 1: $\$1,292,000 + \$950,000 - \$90,000 - \$2,124,000 + \$60,000 = \$88,000$.

Note 2: $\$1,018,000 + \$1,110,000 - \$1,778,000 = \$350,000$

Req. 2

(a) Cash collected from customers

Sales revenue – Increase in Accounts Receivable = $\$4,000,000 - \$30,000 = \$3,970,000$.

(b) Cash paid to suppliers of merchandise inventory

Cost of Goods Sold = Sales – Gross Profit

COGS = $\$4,000,000 - \$2,600,000 = \$1,400,000$

Purchases = EI + COGS – BI = $\$20,000 + \$1,400,000 - \$35,000 = \$1,385,000$

Payments = Beg. A/P + Purchases – Ending A/P = $\$39,000 + \$1,385,000 - \$47,000 = \$1,377,000$

QUESTION 4 (22 marks)

Part A

Accounts Payable	\$136,800 ($\$79,300 + 41,000 + 2,500 + 106,000 - 92,000$)
Loans Payable	\$40,000
Rent Payable	\$84,000 ($2 \times \$42,000$)
Unearned revenue	\$6,000 ($\$9,000 - \$9,000 \times 1/3$)
Estimated Warranty Liability	\$68,000 ($\$47,000 + 22,000 - 1,000$)
Salaries/Wages Payable	\$3,600 ($\$1,200 \times 3$)
Current Portion of Notes Payable	\$5,000 (due Dec. 31, 2009)
Interest payable	\$105 ($\$40,000 \times 6\% \times 16/365$) OR \$100 = ($40,000 \times 6\% \times 0.5/12$)

Part B

Req. 1

Early retirement of the "old bonds" (3 marks)

January 1, 2009:

Bonds payable	100,000	
Loss on early redemption of bonds (\$98,500 – \$97,474)	1,026	
Discount on bonds payable		2,526
Cash (\$100,000 x 98.5%)		98,500

New bond issue (4 marks)

$n = \text{number of interest periods} = 5 \times 2 = 10$

$i = \text{discount rate} = 7\% \times \frac{1}{2} = 3.5\%$

PV of principal	$= \$150,000 \times 0.7089 =$	\$106,335
PV of interest payments	$= \$150,000 \times 6\% \times \frac{1}{2} \times 8.3166 =$	<u>37,425</u>
Bond issue price:		143,760
Discount = 150,000 – 143,760 = 6,240		

January 1, 2009:

Cash	143,760	
Discount on bonds payable	6,240	
Bonds payable		150,000

Req. 2

July 1, 2009 (effective–interest method)

Bond interest expense (\$143,760 x 7% x $\frac{1}{2}$)	5,032	
Discount on bonds payable		532
Cash (\$150,000 x 6% x $\frac{1}{2}$)		4,500

December 31, 2009 (effective–interest method)

Bond interest expense [(\$143,760 + 532) x (7% x $\frac{1}{2}$)]	5,050	
Discount on bonds payable		550
Bond interest payable		4,500