

Solutions to ACCO 230 Final Exam Fall 2013

(Exam Date: Saturday, December 14, 2013)

PROBLEM 1 Multiple-choice (20 marks)

[1 mark each]

- | | | | |
|-----|---|-----|---|
| 1. | C | 19. | B |
| 2. | A | 20. | C |
| 3. | A | | |
| 4. | B | | |
| 5. | C | | |
| 6. | C | | |
| 7. | C | | |
| 8. | B | | |
| 9. | A | | |
| 10. | D | | |
| 11. | A | | |
| 12. | A | | |
| 13. | A | | |
| 14. | A | | |
| 15. | D | | |
| 16. | A | | |
| 17. | B | | |
| 18. | C | | |

PROBLEM 2 Accounting for receivables (21 marks)

1) AFDA, 12-31-11 = $\$5,000,000 \times .05 = \$250,000$

NRV of AR, 12-31-11 = $\$5,000,000 - \$250,000 = \$4,750,000$

2) Accounts receivable	80,000,000	
Sales revenue		80,000,000
Cash	78,000,000	
Sales discounts	1,142,857	
Accounts receivable		79,142,857

[$\$56,000,000 / .98 = \$57,142,857$; therefore discount = $\$1,142,857$]

Allowance for doubtful accounts	300,000	
Accounts receivable		300,000

3) AR, 12-31-12 = $\$5,000,000 + \$80,000,000 - \$79,142,857 - \$300,000$
= $\$5,557,143$

4) Desired balance in AFDA, 12-31-12 = $\$5,557,143 \times .03 = \$166,714$
Unadjusted balance, 12-31-12 = $\$250,000 - \$300,000 = \$50,000$ dr.

Journal entry:

Bad debts expense	216,714	
Allowance for doubtful accounts		216,714

[$(\$50,000) + X = \$166,714$] $\rightarrow X = \$216,714$

5) NRV of AR, 12-31-11 = $\$5,557,143 - \$166,714 = \$5,390,429$

6) AR turnover = $(\$80,000,000 - \$1,142,857) / (\$5,000,000 + \$5,557,143) / 2$
= $\$78,857,143 / \$5,278,572 = 14.94$ times

Average collection period = $365 / 14.94 = 24$ days

The average collection period is substantially below the company's stated terms of 30 days. The firm appears to be doing a good job managing its receivables.

6) Accounts receivable	5,000	
Allowance for doubtful accounts		5,000
Cash	5,000	
Accounts receivable		5,000

OR,

Cash	5,000	
Allowance for doubtful accounts		5,000

- 7) An aging of accounts receivable shows how old each customer's balance is at the balance sheet date. Generally, the older the balance the higher the risk that it will not be collected. This approach will probably provide a better measure of uncollectible accounts than the more global approach currently used by Yolo. The intern is probably right.

PROBLEM 3 Accounting for long-term assets (15 marks)

Part 1

- a) The trademark is impaired because the recoverable amount of \$80,000 is less than the carrying amount of \$90,000 (\$100,000 - \$10,000). Journal entry should be:

Impairment loss -- trademark	10,000	
Trademark, or "Accumulated amortization -- trademark"		10,000

- b) Goodwill is not impaired because recoverable amount is greater than carrying amount. No journal entry is required.

Part 2

Depreciation, 2010 = $\$200,000 \times 1/10 \times 2 = \$40,000$

Depreciation, 2011 = $(\$200,000 - \$40,000) \times 2/10 = \$32,000$

Depreciation, 2012 = $(\$200,000 - \$40,000 - \$32,000) \times 2/10 = \$25,600$

Accumulated depreciation, 12-31-12 = \$40 K + \$32 K + \$25.6 K = \$97.6 K

Journal entry, 1-1-13:

Cash	154,000	
Accumulated depreciation	97,600	
Machine		200,000
Gain on disposal of machine		51,600

Part 3

Accumulated depreciation, June 30, 2013 = $5.5 \times \$100,000 / 15 = \$36,667$

Carrying amount, June 30, 2013 = $\$100,000 - \$36,667 = \$63,333$

Depreciable amount, July 1, 2013 = $\$63,333 + \$30,000 - \$5,000 = \$88,333$

Est. remaining life (years), commencing July 1, 2013 = $15 + 5 - 5.5 = 14.5$

Depreciation expense for 2013 =

$(\$100,000 / 15 \times 6/12) + (\$88,333 / 14.5 \times 6/12) = \$3,333 + \$3,046 = \$6,379$

Part 4

Depreciation rate = $(\$120,000 - \$20,000) / 250,000 \text{ km} = \$.40 \text{ per km.}$

Accumulated depreciation, 12-31-11 = $210,000 \times \$.40 = \$84,000$

Depreciation, 2012 = $50,000 \times \$.40 = \$20,000$??? **But max. is \$16,000 !!!**

Journal entry, 2012:

Depreciation expense	16,000	
Accumulated depreciation		16,000

PROBLEM 4 Preparation of cash flow statement (24 marks)

Req.1 (16 marks)

Jones Ltd.
Cash Flow Statement
For the Year ended December 31, 2012

Operating activities	
Net earnings	\$352,000
Add (deduct) items not affecting cash:	
Depreciation expense	45,000
Gain on disposal of equipment	(6,000)
Decrease in accounts receivable	8,000
Increase in merchandise inventory	(56,000)
Decrease in prepaid expenses	33,000
Decrease in accounts payable	(427,000)
Increase in income taxes payable	<u>7,000</u>
Cash from (used in) operating activities	(\$44,000)
Investing activities	
Acquisition of equipment	(135,000)
Disposal of equipment (Calc. 1)	<u>9,000</u>
Cash from (used in) investing activities	(126,000)
Financing activities	
Issuance of note payable	95,000
Issuance of common shares for cash (Calc. 2)	93,000
Payment of dividends (Calc. 3)	<u>(39,000)</u>
Cash from (used in) financing activities	<u>149,000</u>
Increase (decrease) in cash	(21,000)
Cash balance, December 31, 2011	<u>178,000</u>
Cash balance, December 31, 2012	<u><u>\$157,000</u></u>

Interest paid, \$ 4,000.

Income taxes paid, \$243,000.

Calc 1: $\$694,000 + \$135,000 - \$821,000 = \$8,000$ cost of equipment sold.
 $\$170,000 + \$45,000 - \$210,000 = \$5,000$ accum. depreciation of equipment sold.
 $\$8,000 - \$5,000 + \$6,000 = \$9,000$ proceeds from disposal of equipment.

Calc. 2: $\$160,000 - (\$25,000 + \$17,000 + \$25,000) = \$93,000$.

Calc. 3: $\$303,000 + \$352,000 - \$25,000 - \$591,000 = \$39,000$.

Note - Significant non-cash investing and financing activities

1. Common shares issued in exchange for Land, \$17,000.
2. Common stock dividend distributed, \$25,000.

Req. 2 (4 marks)

Cash paid for operating expenses = $\$2,700,000 - \$45,000 - \$55,000 + \$22,000 = \$2,622,000$.

Cash paid to suppliers of merchandise inventory =
 $\$4,800,000 + \$66,000 - \$10,000 + \$484,000 - \$57,000 = \$5,283,000$.

Req. 3 -- Comments * (4 marks)

Jones Ltd. does not appear to be managing cash effectively, for the following reasons:

- 1) Despite significant net earnings, cash flow from operations is actually negative.
- 2) Inventory balance is increasing. More importantly, however, there is an unusually large reduction in trade payables -- this accounts for most of the negative operating cash flow. One should question why such a large amount of accounts payable was paid.
- 3) Despite the negative operating cash flow the company still paid a significant cash dividend. One should ask why such a large dividend was paid.
- 4) The company has financed the negative operating cash flow and the payment of cash dividends by borrowing on a long-term basis, and issuing common shares. The company may be "mortgaging" its future because of the questionable short term decisions noted above. On the positive side, it appears that management is concerned about replacing old equipment as indicated by the \$135,000 investment in new equipment.

* Accept other valid comments.

PROBLEM 5 Accounting for bonds (20 marks)

- a. $i = 3\%$; $n = 20$
 PV of Face Value = $12,000,000 \times 0.5537 =$ 6644400
 Semi-annual Interest Payment = $12M \times 4\% \times 6/12 =$ 240000
 PV of Interest Payments = $240,000 \times 14.8775 =$ 3570600

 Bonds' Issuance Price = 10,215,000

The bonds were issued at a discount (proceeds less than face value). Also, the contractual interest rate is less than the market interest rate at the time of issue.

b.

c.	Jan. 1, '12	Cash	10,215,000	
		Bonds payable		10,215,000

d.	July 1, '12	Bond interest expense	306,450	
		Bonds Payable		66,450
		Cash		240,000
		$[\$10,215,000 \times .06 \times 1/2 =$	306,450]	
		$[\$12,000,000 \times .04 \times 1/2 =$	240,000]	

	Dec. 31, '12	Bond interest expense	308,444	
		Bonds payable		68,444
		Cash		240,000
		$[(\$10,215,000 + \$66,450) \times .06 \times 1/2 =$	308443.5]	

e.	Jan. 1, '13	(Assume Effective Interest Method)		
		Bonds payable	5,174,947	
		Loss on early redemption of bonds payable	1,725,053	
		Cash		6,900,000
		$[(\$10,215,000 + \$66,450 + \$68,444)/2 =$	5,174,947]	
		$[\$6,000,000 \times 1.15 =$	6,900,000]	

f.

Possible reasons for early redemption:

- to re-finance the debt at a lower interest rate.
- to improve solvency ratios (e.g., debt to equity, debt to total assets)
- to generate a book gain (possibly) to improve net income and EPS.
- other valid points