CONCORDIA UNIVERSITY
DEPARTMENT OF ACCOUNTANCY

FINANCIAL ACCOUNTING
COMM 217 ALL SECTIONS

SUGGESTED SOLUTION - FINAL EXAMINATION - **Winter 2011**

QUESTION 1 (24 MARKS) *Multiple-choice* (1.5 marks per correct answer)

1. b	2. a	3. b	4. d	5. d	6. c	7. c	8. a
9. b	10. b	11. c	12. b	13. c	14. d	15. d	16. c

QUESTION 2 (16 MARKS)

Req. 1 (**3 marks**)

Machine	60,000		$180,000 x (70,000/210,000) = $60,000
Building	120,000		$180,000 x (140,000/210,000) = $120,000
Note payable		100,000	
Cash		80,000	

Req. 2 (**2 marks**) Amortization expense for the machine

2009: $60,000 x (2/10= 20%) = $12,000

2010: ($60,000 – $12,000) x (2/10= 20%) = $9,600

Req. 3 (**4 marks**) Amortization expense for the building

2009: ($120,000 – $2,000) / 20 = $5,900

2010: ($120,000 + $50,000 – $4,100 – $5,900 / (20 – 1 + 6) = $6,400

Req. 4 (**7 marks**)

Amortization Expense	3,200	
Accumulated amortization		3,200

Cash	50,000		
Note receivable	110,000		
Accumulated amortization	15,500		[$5,900 + $6,400 + ($6,400 x 6/12)]
Gain on sale of building		5,500	
Building	170,000		

Net book value at June 30, 2011 = ($120,000 + $50,000) – 15,500 = $154,500

Gain on sale of building = ($50,000 + $110,000) – $154,500 = $5,500

QUESTION 3 (21 MARKS)

Req. 1 (4 marks)

PV of principal	= $313,600,000 x 0.4564 =		$143,127,040
PV of interest payments	= $313,600,000 x 7.5% x ½ x 13.5903 =		159,821,928
Bond issue price:			$302,948,968
Cash		302,948,968	
Discount on bonds payable	($313,600,000 – $302,948,968)	10,651,032	
Bonds payable			313,600,000

Req. 2 (2 marks) August 1, 2010 (effective–interest method)

Bond interest expense	($302,948,968 x 8% x ½)	12,117,959	
Discount on bonds payable			357,959
Cash	($313,600,000 x 7.5% x ½)		11,760,000

Req. 3 (3 marks) January 31, 2011 (effective–interest method)

Bond interest expense	[($302,948,968 + 357,959) x 8% x ½]	12,132,277	
Discount on bonds payable			372,277
Bond interest payable			11,760,000

Req. 4 (5 marks)

Current liabilities:

Bond interest payable	$ 11,760,000	

Long-term liabilities:

Bonds payable, 7.5%, due 2020	$313,600,000	
Less: Discount on bonds payable	9,920,796**	[$10,651,032 – $357,959 – $372,277]
Carrying amount (net liability)	$303,679,204	

Req. 5 (1.5 marks) February 1, 2011

Bond interest payable		11,760,000	
Cash			11,760,000

Req. 6 (3.5 marks) February 1, 2011

Bonds payable	($313,600,000 x .20)	62,720,000	
Loss on early redemption of bonds		3,238,559	
Cash	($313,600,000 x .20 x 1.02)		63,974,400
Discount on bonds payable	($9,920,796 x .20)		1,984,159

Req. 7 (2 marks) Cumulative interest expense (Feb. 1, 2011 - Feb. 1, 2020 => 9 years)

Cash payments	($11,760,000 x .80 x 9 x 2)	$169,344,000
Remaining discount on the bonds	($9,920,796 x .80)	7,936,637
		$177,280,637

QUESTION 4 (19 MARKS)

Karou Corp.
Cash Flow Statement
For the Year ended December 31, 2011

Operating activities			
Net income	$96		
Add (deduct) items not affecting cash :			
Amortization expense	69		
Gain on sale of equipment	(6)		
Increase in non-cash working capital items	(48)		
Cash from operating activities		$111	
Investing activities			
Purchase of equipment (Note 1)	(90)		See details below
Sale of equipment (Note 2)	16		See details below
Cash used in investing activities		(74)	
Financing activities			
Repayment of bonds (Note 3)	(10)		See details below
Issuance of common shares	40		
Payment of dividends (Note 4)	(64)		See details below
Cash used in financing activities		(34)	
Increase in cash during 2011		3	
Cash balance, December 31, 2010		94	
Cash balance, December 31, 2011		$97	

Note: Bonds payable of $20 million were converted to common shares during 2011.

Note 1: Increase in PP&E = Purchase of equipment – Cost of equipment sold
$420 – $370 = Purchase – $40 ==> Purchase = $50 + $40 = $90

Note 2: Cash received = Net book value + gain = $10 + 6 = $16.

Note 3: Decrease in bonds payable = conversion of bonds to shares + repayment of bonds
$120 – $90 = $20 + repayment ==> Repayment = $30 – $20 = $10

Note 4: Increase in retained earnings = Net income – dividends declared
$223 – $191 = $96 – dividends ==> Dividends = $96 – $32 = $64

Req. 2

a) Cash collected from customers = $970 – ($32 – $26) = $964

b) Purchases = $135 + $550 – $90 = $595

Payments = $35 + $595 – $31 = $599

c) Cash paid = $6 – ($3 – $2) = $5

<u>QUESTION 5 (20 MARKS)</u>

Req. 1 (14 marks)

PROFITABILITY RATIOS**:** C*heck only three of the following ratios.*

Return on shareholders' equity = $26,000 / [($46,000 + $60,000)/2] = 0.49 or 49%

This ratio measures the return earned for shareholders on their investment (including retained earnings).

Return on assets = [$26,000 + $4,000 (1 – 0.35) *optional*] / [($98,000 + $122,000)/2] = 0.26 (26%) or 24%

This ratio measures the entity's performance in using total resources (total assets) available to it.

Profit margin = $26,000 / $520,000 = 0.05 (5%)

This ratio indicates the percentage of each sales dollar that is earned as net income.

Fixed assets turnover = $520,000 / [($17,000 + $50,000)/2] = 15.5

This ratio measures the amount of sales generated per dollar of fixed assets.

LIQUIDITY RATIOS**:** C*heck only three of the following ratios.*

Current ratio = $72,000 / $14,000 = 5.14

This ratio measures the adequacy of working capital by relating total current assets to total current liabilities.

Quick ratio = ($10,000 + $25,000) / $14,000 = 2.5

This ratio is a severe test of liquidity by relating quick assets to total current liabilities.

Cash ratio = $10,000 / $14,000 = 0.71

This ratio indicates the immediate liquidity, and reflects the percentage of cash and cash equivalents that are available to pay current liabilities.

Receivables turnover = ($520,000 x 40%) / [($25,000 + $39,000)/2] = 6.5

This ratio measures the effectiveness of credit granting and collection of receivables.

Inventory turnover = $360,000 / [($19,000 + $23,000)/2] = 17.14

This ratio reflects the number of times inventory was purchased and sold during the year.

SOLVENCY RATIOS: C*heck only one of the following ratios.*

Debt to equity ratio = $62,000 / $60,000 = 1.03

This ratio measures the relationship between resources provided by creditors and those provided by owners.

Times interest earned ratio = ($26,000 + $14,000 + $4,000) / $4,000 = 11

This ratio measures the amount of earnings available to cover interest expense.

Req. 2 (2 marks)

The profit margin ratio equals 5%, indicating that the company earned 5 cents per dollar of sales.
This ratio should be compared to the company's ratios for previous years and to other companies in the same industry in order to evaluate the relative performance of the company's management.
Also could be integrated into a model (e,g., Dupont) to analyse ROE.

Req. 3 (2 marks)

The quick ratio is more conservative than the current ratio because it only considers cash, short-term investments and receivables as items that are available in the very short term to pay current liabilities.
The quick ratio is relatively high. The company does not appear to be facing liquidity problems.

Req. 4 (2 marks)

The company allows customers 30 days for collection of accounts receivable, but the average collection period is 56 days (365 / 6.5, receivable turnover computed above). This is not consistent with (higher than) the company's credit policy.