Problem 1

Part A (9 marks; multiple-choice)

1. a
2. c
3. a
4. a
5. b
6. a

Part B (7 marks) *Impact of an inventory error*

	Beginning Inventory	Income Tax Expense	Net Earnings	Ending Retained Earnings	Ending Inventory	Days in Inventory	Net Sales
2009	NE	U	U	U	U	U	NE
2010	U	O	O	NE	NE	U	NE
	////////////////////	////////////////////	////////////////////	////////////////////	////////////////////	////////////////////	////////////////////

Part (C) (7 marks) *Fill in the blanks --- depreciation methods*

Straight-line depreciation method is assumed:

Year	Depreciation expense	Carrying amount at end of year
2010	$8,167	$141,833
2011	$14,000	$127,833

Units-of-production depreciation method is assumed:

Year	Depreciation expense	Carrying amount at end of year
2010	$14,934	$135,066
2011	$14,934	$120,132

Double-diminishing-balance depreciation method is assumed:

Year	Depreciation expense	Carrying amount at end of year
2010	$17,500	$132,500
2011	$26,500	$106,000

SL: ($150,000 - $10,000) / 10 years = $14,000 dep'n for a full year; $14,000 x 7/12 = $8,167 dep'n in 2010.
$150,000 - $8,167 = $141,833 (CA, end of 2010).
$141,833 - $14,000 = $127,833 (CA, end of 2011).

U of P: ($150,000 - $10,000) / (8 x 8,000 + 2 x 5,500) units = $140,000 / 75,000 units = $1.8667 per unit.
8,000 x $1.8667 = $14,934 dep'n (in each of the years 2010 and 2011).
$150,000 - $14,934 = $135,066 (CA, end of 2010).
$135,066 - $14,934 = $120,132 (CA, end of 2011).

DDB: $150,000 x 1/10 x 2 x 7/12 = $17,500 dep'n in 2010
$150,000 - $17,500 = $132,500 (CA, end of 2010)
$132,500 x 1/10 x 2 = $26,500 dep'n in 2011.
$132,500 - $26,500 = $106,000 (CA, end of 2011)

Problem 2

Jan. 1	Cash	500,000	
	Common shares		500,000

[20,000 x $25 = $500,000]

Jan. 2	Trademark	53,980	
	Cash		53,980

Jan. 31a	Equipment	44,000	
	Common shares		44,000

[2,000 x $22 = $44,000]

Jan. 31b	Equipment	3,000	
	Cash		3,000

May 8	Purchases	11,250	
	Freight-in	650	
	Cash		11,900

June 15	Common shares	37,091	
	Retained earnings	3,409	
	Cash		40,500

[($500,000 + $44,000) / (20,000 + 2,000)] x 1,500 = $24.7273 x 1,500 = $37,091
[1,500 x $27 = $40,500]

Sept. 30	Retained earnings	47,150	
	Common stock dividend distributable		47,150

(20,000 + 2,000 - 1,500) x .10 x $23 = 20,500 x .10 x $23 = 2,050 x $23 = $47,150.

Oct. 30	Common stock dividend distributable	47,150	
	Common shares		47,150

Nov. 25	Retained earnings	9,020	
	Dividend payable		9,020

(20,500 + 2,050) x $ .40 = 22,550 x $ .40 = $9,020.

Dec. 1	Cash	200,000	
	Loan payable		200,000

Dec. 20	Dividend payable	9,020	
	Cash		9,020

Dec. 31a	Depreciation expense	28,722	
	Accumulated depreciation		28,722

($44,000 + $3,000) x 1/3 x 2 x 11/12 = $47,000 x 2/3 x 11/12 = $28,722.

Dec. 31b	Interest expense	1,000	
	Loan payable	1,220	
	Cash		2,220

($200,000 x .06 x 1/12 = $1,000.)

Dec. 31c	Cash	19,475	
	Accumulated depreciation	28,722	
	Equipment		47,000
	Gain on disposal of equipment		1,197

Dec. 31d	Impairment loss -- Trademark	18,980	
	Trademark		18,980

($53,980 - $35,000 = $18,980)

Problem 3

1. JE: Feb. 1, 2010:

Cash	32,425,600	
Bonds payable		32,425,600

2. JE, July 31, 2010:

Interest expense	1,297,024	
Bonds payable	35,776	
Cash		1,332,800

($32,425,600 x .08 x 6/12 = $1,297,024)
($31,360,000 x .085 x 6/12 = $2,665,600 x 6/12 =$1,332,800)

3. JE, August 1, 2010:

Bonds payable	3,238,982	
Cash		3,104,640
Gain on redemption of bonds payable		134,342

[($32,425,600 - $35,776) x .10 = $32,389,824 x .10 = $3,238,982]

[$31,360,000 x .10 x .99 = $3,136,000 x .99 = $3,104,640]

4. Immediate impact of the early redemption on the following:

(a)	Free cash flow	No effect
(b)	Current ratio	Worse
c)	Gross profit margin	No effect
(d)	Asset turnover	Better
(e)	Cash total debt coverage	Better
(f)	EPS	Better
(g)	Return on assets	Better
(h)	Debt to total assets	Better

5. (a) Interest paid, Jan. 31, 2011:

$1,332,800 x .90 = $1,199,520

OR

($31,360,000 x .90 x .085 x 6/12 = $28,224,000 x .085 x 6/12 = $1,199,520)

(b) Cumulative interest expense, Feb. 1, 2010 to Jan. 31, 2020:

Interest expense up to July 31, 2010 (see above)	$ 1,297,024
Interest expense, Aug. 1, 2010 - Jan. 31, 2020 ($1,199,520 x 19) - ($29,150,842 * - $28,224,000)	
= [$22,790,880 - $926,842]	$21,864,038
	$23,161,062

* $32,425,600 - $35,776 - $3,238,982 = $29,150,842.

Problem 4

Req.1

Jones Ltd.
Cash Flow Statement
For the Year ended December 31, 2010

Operating activities		
Net earnings	$472,000	
Add (deduct) items not affecting cash:		
Depreciation expense	43,000	
Loss on disposal of equipment	1,000	
Increase in accounts receivable	(12,000)	
Increase in merchandise inventory	(37,000)	
Decrease in prepaid expenses	13,000	
Decrease in accounts payable	(537,000)	
Increase in income taxes payable	17,000	
Cash from (used in) operating activities		($40,000)
Investing activities		
Acquisition of equipment	(134,000)	
Disposal of equipment (Calc. 1)	4,000	
Cash from (used in) investing activities		(130,000)
Financing activities		
Issuance of note payable	91,000	
Issuance of common shares for cash (Calc. 2)	103,000	
Payment of dividends (Calc. 3)	(65,000)	
Cash from (used in) financing activities		129,000
Increase (decrease) in cash		(41,000)
Cash balance, December 31, 2009		178,000
Cash balance, December 31, 2010		$137,000

Calc 1: $694,000 + $134,000 - $820,000 = $8,000 cost of equipment sold.

$170,000 + $43,000 - $210,000 = $3,000 accum. depreciation of equipment sold.

$8,000 - $3,000 - $1,000 = $4,000 proceeds from disposal of equipment.

Calc. 2: $160,000 - ($25,000 + $17,000 + $15,000) = $103,000.

Calc. 3: $203,000 + $472,000 - $15,000 - $595,000 = $65,000.

Note X -- Significant non-cash investing and financing activities

1. Common shares issued in exchange for Land, $17,000.
2. Common stock dividend distributed, $15,000.

Req. 2

Cash paid for operating expenses = $2,700,000 - $43,000 - $55,000 + $42,000 = $2,644,000.

Cash paid to suppliers of merchandise inventory =

$4,500,000 + $67,000 - $30,000 + $584,000 - $47,000 = $5,074,000.

Req. 3 -- Comments *

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) Receivables and inventory balances are 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 $134,000 investment in new equipment.

* Accept other valid comments.

Problem 5

Req. (a)

1.	Accounts receivable	15,300,000	
	Cash	1,700,000	
	Sales revenue		17,000,000
	$17,000,000 x .90 = $15,300,000		
2.	Sales returns and allowances	150,000	
	Accounts receivable		150,000
3.	Cash	15,306,600	
	Sales discounts	473,400	
	Account receivable		15,780,000
	$15,306,600 / (1 - .03) = $15,306,600 / .97 = $15,780,000		
4.	Accounts receivable	2,000	
	Interest revenue		2,000
5.	Allowance for doubtful accounts	7,000	
	Accounts receivable		7,000
6.	Cash	1,000	
	Allowance for doubtful accounts		1,000

Req. (b) AJE for bad debts expense

Bad debts expense	8,000	
Allowance for doubtful accounts		8,000

Unadjusted balance in AFDA = $1,485,000 / .99 x .01 - $7,000 + $1,000 = $9,000.
Bad debts expense = $17,000 - $9,000 = $8,000.

Req. (c)

Bateman and Brand Ltd.
Balance sheet (partial, comparative)
December 31

	2010	2009
Current assets:		
:		
Accounts receivable	$865,000 ***	$1,500,000 *
Less: Allowance for doubtful accounts	17,000	15,000 **
Net realizable value of accounts receivable	$848,000	$1,485,000

* $1,485,000 / .99 = $1,500,000.
** $1,500,000 x .01 = $15,000.
*** $1,500,000 + $15,300,000 - $150,000 - $15,780,000 + $2,000 - $7,000 = $865,000.

Req. (d)

AR turnover, 2010 = ($15,300,000 - $150,000 - $473,400) / (($1,500,000 + $865,000)/2)
= $14,676,600 / $1,182,500 = 12.41.

AR turnover, per stated credit terms = 365 / 30 = 12.17.

AR turnover is only slightly better than the stated credit terms (12.41 versus 12.17).

Req. (e)

Gross profit = ($17,000,000 - $150,000 - $473,400) x (1 - .40) = $16,376,600 x .60 = $9,825,960.