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Final Exam (SUGGESTED SOLUTIONS)
Intermediate Financial Accounting II
Winter 2015
ADM3340 Section M

Name: _____ **ID#:** _____

Instructions

- Write your name and student ID number above. Indicate your section.
- Reminder: it is an offence to have a cell phone or any other communication device in your possession during this exam's three hours. (see the Statement of Academic integrity on page 2 of this exam).
- This examination "SUGGESTED SOLUTION" comprises **5** questions over **20** numbered pages.
- Answer Question 1's multiple-choice questions on the SCANTRON sheet provided.
- Answer Questions 2-5 in this booklet.
- Booklet is **not** to be removed from the examination room. You may not separate the pages.
- Limit your answer to the space provided.
- This exam will be marked out of 100 marks for convenience and is 3 hours long. You should budget approximately 1.8 minutes per mark. The exam is worth 50% of the overall course mark.
- Please do not ask the invigilator or the professor any questions, as they will not be answered. State reasonable assumptions, if you feel they are necessary.
- Present value tables are provided on pages 19-20.
- Language (non-electronic) dictionaries are allowed if permitted by the professor and/or the proctor.
- You ***must*** sign the Statement of Academic integrity on page 2 of this exam.
- At the end of the exam you must sign the "Exam Submission Sheet" as proof that you have personally handed this exam to the proctor.

Chapter(s)	Question		Marks
12-17; 21, 22	1	20 x 1-mark multiple-choice questions	/20
16	2: part 1	Derivatives	/5
	2: part 2	SARs	/7
	2: part 3	Classification	/6
	2: part 4	Convertible bond: conversion	/8
17	3	EPS	/14
21	4: part 1	Accounting changes and error analysis	/7
	4: part 2		/7
	4: part 3		/9
	4: part 4		/3
22	5	Statement of Cash Flows	/14
	TOTAL		/100

Statement of Academic Integrity
The Telfer School of Management does not condone academic fraud, an act by a student that may result in a false academic evaluation of that student or of another student. Without limiting the generality of this definition, academic fraud occurs when a student commits any of the following offences: plagiarism or cheating of any kind, use of books, notes, mathematical tables, dictionaries or other study aid unless an explicit written note to the contrary appears on the exam, to have in his/her possession cameras, radios (radios with head sets), tape recorders, pagers, cell phones, or any other communication device which has not been previously authorized in writing.

Statement to be signed by the student:
I have read the text on academic integrity and I pledge not to have committed or attempted to commit academic fraud in this examination.

Signed:_____

Note: an examination copy or booklet without that signed statement will not be graded and will receive an exam grade of zero.

QUESTION 1 (20 marks: 1 mark each)

Answer ALL parts to this question on the SCANTRON sheet provided. Each part is independent. The marker will not assess anything you write on this or the following page.

The Multiple Choice Questions & Answers have been purposely omitted from this document.

QUESTION 1 (20 marks: 1 mark each) (continued)

QUESTION 2 (26 marks)

Answer ALL parts to this question. Each part is independent.

PART 1: (5 marks)

On August 25, 2014, Surabaya Inc. entered into a forward contract to buy 50,000 Krupiah (KRP) for $8,300 Canadian (CAD) on September 5, 2014. When Surabaya Inc. prepares it balance sheet on August 31, 2014, 50,000 KRP can be purchased for $8,000 CAD. On September 5, Surabaya settles the contract but does **not** take delivery of the KRP. On September 5, 2014, the KRP is trading at $0.17 CAD.

Required

a) Any Surabaya Inc. journal entries necessary for this contract on August 31, 2014.

b) The Surabaya Inc. journal entry to record the settlement of the contract on September 5, 2014

Solution

(a) August 31, 2014

Loss on forward contract		**300**	
	Derivatives—Financial Assets/Liabilities		**300**

(b) September 05, 2014

Derivatives—Financial Assets/Liabilities		**300**	
Cash		**200**	
	Gain		**500***

***50,000 x $0.17 = $8,500;**
$500 = [$8,500 September 5 – $8,000 August 31]

QUESTION 2 (26 marks) (continued)

Answer ALL parts to this question. Each part is independent

PART 2: (7 marks)

On January 1, 2014, Phuket Ltd. established a stock appreciation rights (SAR) plan for its executives. The SARs vest over four years [January 1, 2014 to December 31, 2017] and can be cashed/exercised between January 1, 2018 and December 31, 2021 for an amount equal to the difference between the market price of the common shares and a pre-established price of $16 for 180,000 SARs. The market prices of the common shares are:

Dec 31, 2014—$21
Dec 31, 2015—$18
Dec 31, 2016—$19
Dec 31, 2017—$20

The SARs are exercised on December 31, 2018 when the market price per share is $22. Assume Phuket Ltd. follows ASPE.

Required

(a) Prepare a schedule that shows the amount of compensation expense for each of the four years in the vesting period, starting with 2014.
(b) Prepare the journal entry at December 31, 2015 to record compensation expense.
(c) Prepare the journal entry at December 31, 2018 to record the exercise of the SARs.

SOLUTION

(a) Schedule of Compensation Expense
180,000 SARs

Date	Market Price	Set Price	Value of SARs	Percent Accrued	Accrued to Date	Expense
Dec. 31, 2014	$21	$16	$900,000	25%	$225,000	$225,000
					(45,000)	
Dec. 31, 2015	18	16	360,000	50%	180,000	(45,000)
					225,000	
Dec. 31, 2016	19	16	540,000	75%	405,000	225,000
					315,000	
Dec. 31, 2017	20	16	720,000	100%	720,000	315,000

(b) December 31, 2015

Liability Under Stock Appreciation Plan.....	45,000	
Compensation Expense.....		45,000

(c) December 31, 2018

Compensation expense.....	360,000	
Liability Under Stock Appreciation Plan.....	720,000	
Cash.....		1,080,000

QUESTION 2 (26 marks) (continued)

Answer ALL parts to this question. Each part is independent

PART 3: (6 marks)

A description of several financial instruments follows. Classify each financial instrument for the issuer as debt, equity, or hybrid. You must explain clearly your reasoning.

a) Series D shares, voting, annual $4 non-cumulative dividend, redeemable at the investor's option for $60 per share.

b) Series B preferred shares, annual $6 cumulative dividend, convertible into four common shares for every $100 preferred share at the investor's option, redeemable at $32 per share at the company's option.

c) Subordinated 8% debentures payable, interest payable in cash semi-annually, due on 31 December 2016. At maturity, the face value of the debentures must be converted into shares at a price of $12.50 per share.

a. This is a financial liability. The investor can demand redemption of principal, which makes the instrument debt.

Or, a hybrid:

Equity: the dividends can be avoided and not paid in cash or cash equivalent;
Financial liability: the issue cannot avoiding paying cash ($60 per share) if so requested by the investor.

b. These shares are equity because they are convertible into a fixed number of common shares at the option of the investor. The company has the option to redeem for cash, but it cannot be forced to do so by the investor; this feature does not make the financial instrument a liability.

c. This financial instrument is a compound instrument, part debt and part equity.
Financial liability: because the interest payments cannot be avoided and must be paid in cash.
Equity: the maturity value must be converted into a fixed number of common shares.
The interest payments have to be made semi-annually, so the present value of the interest obligation is debt. The residual is assigned to principal and it is equity because the company cannot be forced to pay cash or cash equivalent.

QUESTION 2 (26 marks) (continued)

Answer ALL parts to this question. Each part is independent

PART 4: (8 marks)

BondTerrier Inc. issues 7 year convertible (at the holder's option) bonds with a face value of $5,000,000 and a coupon rate of 6.00% for $5,250,000. The company is compliant with IFRS and uses the incremental (residual) approach (as per IFRS 9, IAS32.31, and IAS32.32) to allocate $4,471,843 of the issuance proceeds to the bond liability and $778,157 to the conversion feature. Bond interest is paid semi-annually and the company amortizes any bond discount or premium using the effective interest rate method. When the bonds are issued, the prevailing market interest rate per year for similar debt without a conversion option is 8.00%.

Option pricing models indicate that the conversion option's value on the date the bonds are issued is $300,000. Each $1,000 face value bond can be converted by the holder into 20 shares. 40% of the $5,000,000 face value bonds are converted after interest is paid at the end of semi-annual period 8 when the fair market value per share is $60.00. Assume all transactions occur on interest payment dates.

Required

Provide the journal entry necessary at the end of semi-annual period 8 to record the conversion.

BondTerrier: Accounting for the Life-Cycle Events of Convertible (investor option) Bond Liabilities

Reset Recalculate

Intro | INPUT_1 | INPUT_2 | Text | ISSUANCE | Any_Period | Conversion | Called | Maturity | Amortization | IAS32 | IRR | OtherApps

The solution below assumes IFRS [IAS 32 and IAS 39].

End of semi- annual period	8		Dr	Cr
Interest expense			187,995.92	
	Bond discount			37,995.92
	Cash			150,000.00
To record, before the conversion at the end of semi- annual period 8: the interest payment of $150,000, the interest expense of $187,996 and $37,996 amortization of the bond discount (see semi- annual period 8 on the amortization table).				
Interest expense		$187,996 = $4,699,897 [the amortized cost (net bond liability) at the beginning of semi- annual period 8] x 4.000% [the IRR or yield per semi- annual period]. Or $187,996 = $150,000 cash + $37,996.		
Cash		$150,000 = $5,000,000 x (6.00%/2).		
Bond discount amortization		$37,996 [see the amortization table].		
Bond liability			2,000,000.00	
Contributed capital: common stock conversion rights			311,262.62	
	Bond discount			104,842.82
	Common shares			2,206,419.80
Note; the above journal entry employs the 'Book Value Method' required by IAS32.AG32 for recording the conversion: the Common Shares account is credited with $2,206,420 which is equal to the amortized cost (net bond liability) at the end of semi- annual period 8 of the 40.00% of bonds converted ($1,895,157 = $2,000,000 - $104,843) plus $311,263, their 40.00% share of the $778,157 Contributed capital: common stock conversion rights (as shown on the Issuance screen).				
'Market Value Method': if the market value at the end of semi- annual period 8 of the 40,000 (100,000 x 40.00%) shares issued upon conversion is $2,400,000 ($60 x 40,000 as you have specified in the INPUT_1 screen) the 'Market Value Method' would credit the Common Shares account with $2,400,000 and debit the Loss On Conversion of Bonds account (an income statement account) with $193,580 = [$2,400,000 - ($2,000,000 - $104,843) - $311,263], as shown below. Please note that the 'Market Value Method', while conceptually attractive, is not permitted by IAS32.				
Bond liability			2,000,000.00	
Contributed capital: common stock conversion rights			311,262.62	
Loss on conversion of bonds			193,580.20	
	Bond discount			104,842.82
	Common shares			2,400,000.00

QUESTION 3 (14 marks)

Yukos Lumber Company (YLC) reported the following facts for the accounting year ended 31 December 2014:

(i) The effective income tax rate was 40%.

(ii) The average share price in 2014 was $45 and was fairly constant all year.

(iii) No dividends were declared in 2014.

(iv) On 1 January 2014, 470,400 common shares were outstanding.

(v) On 1 January 2014, 10,000, $4.20 cumulative preferred shares were outstanding.

(vi) Options to purchase 20,000 common shares at $28 were outstanding all during 2014. The options can be exercised beginning in 2017.

(vii) On 1 September, 2014, YLC issued 30,000 additional common shares for cash.

(viii) YLC had $1,500,000 convertible bonds outstanding at 1 January, 2014 with interest payable on 1 June and 1 December and each $1,000 bond convertible into 30 common shares. $600,000 of the bonds were converted into common shares on 1 June 2014. YLC reported interest expense of $78,200, which included $17,000 on the converted bonds.

(ix) Employee stock options (which can be exercised beginning in 2020) to purchase 30,000 common shares at $50 per share were awarded on 1 October 2014.

(x) 2014 income from continuing operations, after tax, of $1,050,000. The company also reported a before-tax gain from discontinued operations of $112,000.

(xi) 2014 comprehensive income of $1,087,000.

Required

a) Prepare all basic EPS presentations required for 2014. Show all computations. (4 marks)

b) Prepare all diluted EPS presentations required for 2014. Show all computations. (10 marks)

	Earnings available to common shareholders	***Weighted average number of shares***	***Earnings per Share***
Net income before disc. ops	**$1,050,000**		
Preferred dividends			
10,000 x $4.20	**(42,000)**		
	$1,008,000		
Shares outstanding			
470,400 x 5/12		**196,000**	
488,400 (1) x 3/12		**122,100**	
518,400 x 4/12		**172,800**	
		490,900	
Basic EPS			**$2.05**

(1) ($600,000/$1,000) x 30 = 18,000; 18,000 + 470,400

Individual impacts:

1. **$28 Stock option**
   Shares issued: 20,000
   Shares retired (20,000 x $28)/$45 = 12,444
2. **$50 Stock option**
   Not in the money, as $50 is greater than $45.
3. **Converted bonds**
   Interest expense $17,000 x (1-.4)/ shares 18,000 x 5/12 = $10,200/ 7,500 = $1.36
4. **Remaining bonds**
   Interest expense / shares = $61,200* x (1-.4) / ($900,000/$1,000) x 30
   = $36,720/27,000 = $1.36;

*** $61,200 = $78,200 - $17,000**

QUESTION 3 (14 marks) (continued)

	Earnings available to common shareholders	*Weighted average number of shares*	*Earnings per Share*
Diluted EPS:			
Basic totals	**$1,008,000**	**490,900**	**$2.05**
$28 Stock option			
Shares issued		**20,000**	
Shares retired (20,000 x $28)/$45		**(12,444)**	
Subtotal	**1,008,000**	**498,456**	**$2.02**
Bond, backdating actual conversion			
Interest $17,000 (1-.4)	**10,200**		
Shares 18,000 x 5/12		**7,500**	
Bond			
Interest $61,200 x (1-.4)	**36,720**		
Shares ($900,000/$1,000) x 30 x 12/12		**27,000**	
Diluted EPS	**$1,054,920**	**532,956**	**$1.98**

Income statement presentation:

	Basic	Diluted
Income before discontinued operations	**$2.05**	**$1.98**
Discontinued operations*	**.14**	**.13**
Net income**	**$2.19**	**$2.11**

*** $112,000 x (1-.4) / 490,900; 532,956**
$0.14 ; $0.13

**** [$1,050,000 + ($112,000 x (1-.4)) - $42,000] / 490,900 = [$1,117,200 - $42,000] / 490,900 = $2.19**

[$1,117,200 - $42,000 + $10,200 + $36,720] / 532,956 = $1,122,120/532,956 = $2.11

QUESTION 4 (26 marks)

Part 1 (7 marks)

Dhoni Company has a December 31 year-end and follows IFRS. The before-tax income for Dhoni Company was $77,400 for 2014. However, the accountant noted the following information that is not reflected in the income figure above:

In 2013, external and internal indicators showed that an impairment may have occurred with Dhoni's research equipment which Dhoni also measures under the revaluation model. The accountant had provided the bookkeeper the following information to use for impairment testing: on December 31, 2013 the asset had a carrying value of $174,400 (cost of $280,000 and accumulated depreciation of $105,600) and was assessed on December 31, 2013 as having a value in use and fair value less costs to sell of $170,000 and $160,000, respectively. The research equipment had originally been purchased on January 1, 2010, and had been depreciated using the straight-line method. The useful life and residual value of the asset were estimated to be 10 years and $16,000, respectively, on the acquisition date. However, as of January1, 2014, the remaining useful life and residual value of the asset were estimated to be 8 years and $20,000, respectively. Unfortunately, the bookkeeper had ignored these latest estimates. The bookkeeper had also forgotten to perform the impairment test in 2013. No impairment losses or loss reversals had been recorded for this asset prior to 2013.

Required
Prepare all necessary journal entries on December 31, 2014 to reflect the above situation assuming 2014's annual depreciation has already been recorded and Dhoni's books have not been closed for 2014. Ignore income taxes. You must provide all supporting calculations.

SOLUTION

Accumulated depreciation- research equipment.....	105,600	
Research equipment		105,600

Retained earnings (2013)	4,400	
Accumulated impairment loss - research equipment		4,400

Accumulated depreciation – - research equipment.....	7,650	
Depreciation expense (2014)		7,650

The excessive depreciation taken in 2014 on the research equipment is $6,400, following the approach in www.capitalassetrevaluation.com :

2014 depreciation erroneously taken ($280,000 – $16,000) / 10 years	$ 26,400 DR
2014 correct depreciation ($170,000 – $20,000) / 8 years	$ 18,750 DR
Excessive depreciation taken in 2014	$ 7,650 CR

This approach assumes the revaluation to $170,000 is effective only from 1/1/2014.

If you follow the approach in www.capitalassetrevaluation.com :
2013 Impairment loss which should have been recorded on 31/12/2013: $ 4,400 DR
($174,400 carrying value – $170,000 higher of value in use and fair value less costs to sell)
This approach assumes the revaluation to $170,000 is effective from the end of 2013.

QUESTION 4 (26 marks) (continued)

Part 2 (7 marks)

Ratnatunga Inc reported net incomes for a three-year period as follows:
2012, $62,000; 2013, $63,000; 2014, $60,000.

In reviewing the accounts in 2015 (after the books for 2014 had been closed), you find that the following errors have been made:

	2012	2013	2014
Overstatement of ending inventory	$7,000	$8,500	$4,000
Understatement of accrued advertising expense	1,100	2,000	1,200

Required

a) Calculate corrected net incomes for 2012, 2013, and 2014.

b) Prepare the entry to bring the books of the company up to date in 2014. Ignore income taxes.

(a)	2012	2013	2014	2015
Net income (unadjusted)	$62,000	$63,000	$60,000	
Overstatement of ending inventory—2012	(7,000)	7,000		
Overstatement of ending inventory—2013		(8,500)	8,500	
Overstatement of ending inventory—2014			(4,000)	4,000
Understatement of accrued advertising expense—2012	(1,100)	1,100		
Understatement of accrued advertising expense—2013		(2,000)	2,000	
Understatement of accrued advertising expense—2014			(1,200)	1,200
Net income (corrected)	$53,900	$60,600	$65,300	

(b) Retained Earnings	5,200*	
Advertising Expense or Payable		1,200
Inventory or COGS		4,000

* ($62,000 + $63,000 + $60,000) – ($53,900 + $60,600 + $65,300) = $5,200

QUESTION 4 (26 marks) (continued)

Part 3 (9 marks)

The following are various types of accounting changes:

1.	Change in plant asset's residual value.
2.	Change due to an overstatement of inventory.
3.	Change from sum-of-the-years'-digits to straight-line method of depreciation because of a change in the pattern of benefits received.
4.	Change in a primary source of GAAP.
5.	Decision by management to capitalize interest on a self-constructed asset: the company is reporting a self-constructed asset for the first time.
6.	Change in the rate used to calculate warranty costs.
7.	Change from an unacceptable accounting principle to an acceptable accounting principle.
8.	Change in a patent's amortization period.
9.	Change from the zero-profit method to the percentage-of-completion method on construction contracts. This change was a result of experience with the project and improved ability to estimate the costs to completion and therefore the percentage complete.

Required

a) For each of the situations in items 1 to 9 choose the correct code letter from Table 1and enter it in Table 2's "Accounting Treatment Code" column to indicate how each of the situations would be accounted for assuming the company follows IFRS.

Table 1

	Accounting Treatment Code
Accounted for in the current year only	CY
Accounted for prospectively	P
Accounted for retrospectively	R
None of the above, or unable to tell. Explain	NA

b) In the "Type of Change" column in Table 2, identify the type of change (*change in estimate*, *accounting error correction*, *change in policy*, *not an accounting change*) for each of the situations in items 1 to 9.

Table 2

	a) Accounting Treatment Code	b) Type of Change
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		

Part 3 (9 marks) (continued)

	Accounting treatment	Type of change
1.	P	Change in estimate
2.	R	Accounting error correction
3.	P	Change in estimate
4.	NA*	Change in policy
5.	P	Not an accounting change – selection of policy for first time.
6.	P	Change in estimate
7.	R	Accounting error correction
8.	P	Change in estimate
9.	P	Change in estimate

* The accounting treatment would be specified in the transitional provisions of the new source of GAAP. If not specified, then apply retrospectively.

Note that the only two approaches that are permitted for reporting changes are retrospective and prospective treatment. When new or revised sources of primary GAAP are adopted, recommendations are usually included that specify how an entity should handle the transition. These are called transitional provisions.

Part 4 (3 marks)

Barcelona Properties Corporation purchased a parcel of land in 2013 for $1 million with the intention of constructing a building on the property in the near future. At the time of purchase, and in the subsequent financial statements for the years ended December 31, 2013, and 2014, Barcelona applied the cost model and measured and reported the land at its acquisition cost as allowed in IAS 16. Barcelona follows IFRS and management decided in early 2015 that the land qualifies as an investment property under IAS 40 and that Barcelona is to apply the fair value though net income (FV/NI) model of accounting for investment properties effective immediately because the company believes that changing the measurement model will provide more relevant information. Independent appraisals indicate that the land's fair value at December 31, 2013, and 2014, was $980,000 and $1,050,000, respectively. Barcelona's reported retained earnings at December 31, 2013, and 2014, were $230,000 and $290,000, respectively.

Required
Prepare Barcelona's journal entry, if any, in 2015 to record the change in accounting policy. (show all supporting calculations).

The entry required January 1, 2015 to reclassify Land is:

Land – Investment Property (FV/NI)	1,000,000	
Land		1,000,000

The entry required January 1, 2015 to restate opening Retained Earnings is:

Land – Investment Property (FV/NI)	50,000	
Retained Earnings		50,000

OR

January 1, 2015

Land – Investment Property (FV/NI)	1,050,000	
Land		1,000,000
Retained Earnings		50,000

QUESTION 5 (14 marks)

The statement of financial position, statement of income, and additional information are given below for the Caracas Company, which reports using IFRS.

Statement of Financial Position

	31/12/2013	31/12/2014
Cash	$40,000	$44,900
Accounts receivable	60,000	52,500
Inventories	180,000	141,600
Prepaid interest	2,400	1,200
Investments, FV-NI	30,000	0
Investments, FV-OCI	17,000	12,000
Land	10,000	38,400
Property, plant, and equipment	250,000	259,000
Accumulated depreciation	(65,000)	(79,000)
Patent (net)	1,600	1,400
Total assets	$526,000	$472,000
Accounts payable	$50,000	$49,700
Wages payable	2,000	1,500
Income taxes payable	9,000	13,400
Bond payable	100,000	50,000
Common shares	320,000	329,000
Retained earnings	38,000	26,400
Accumulated Other Comprehensive Income	7,000	2,000
Total liabilities and shareholders' equity	$526,000	$472,000

Statement of Comprehensive Income
For the year ending 31 December 2014

Sales revenue	$399,100
Cost of goods sold	(224,400)
Depreciation expense	(14,000)
Patent amortization	(200)
Salary expense	(80,000)
Interest expense	(4,400)
Other expenses	(44,000)
Investment revenue	900
Gain on sale of FV-NI investments	10,000
Income tax expense	(24,600)
Net income	$18,400
Other comprehensive income	
Loss on FV-OCI investments	5,000
Comprehensive income	$13,400

Analysis of Selected Accounts and Transactions

(i) Purchased property, plant, and equipment, $9,000; payment by issuing 600 common shares.

(ii) Payment at maturity date to retire bonds payable, $50,000.

(iii) Sold the FV-NI investments for $40,000.

(iv) Reassessment for prior years' income taxes; $6,600 paid during 2014 and included in 2014's reported income tax expense.

(v) Purchased land, $28,400; paid cash.

Required

Prepare, in good form, the statement of cash flows for 2014, using the direct method. The *cash from operations* section should provide information on each of the following:

- Cash collected from customers;
- Cash payments to inventory suppliers;
- Cash payments to employees for wages;
- Cash payments for other expenses;
- Cash payments for interest;
- Cash payments for income taxes;
- Cash collected on investment income.

SOLUTION

CARACAS COMPANY
Statement of Cash Flow
Year ended 31 December 2014

Operating Activities		
Cash from customers ($399,100 + $7,500)	$406,600	
Cash paid for materials (1)	(186,300)	
Cash paid for wages & salaries (2)	(80,500)	
Cash paid for other expenses (3)	(44,000)	
Cash paid for interest ($4,400 - $1,200)	(3,200)	
Cash paid for income tax ($24,600 - $4,400)	(20,200)	
Cash interest received	900	
Cash generated from operations		$73,300
Investing activities:		
Sold long-term investment	40,000	
Purchased land	(28,400)	
Cash from investing		11,600
Financing activities:		
Dividends paid ($38,000 + $18,400 versus $26,400)	(30,000)	
Bonds payable retired	(50,000)	
Cash used for financing		(80,000)
Net increase in cash during the year		4,900
Cash balance, beginning of the year		40,000
Cash balance, end of the year		$44,900

Note: Purchased property, plant, and equipment, $9,000; payment by issuing 600 common shares.

(1) $224,400 - $38,400 + $300
(2) $80,000 + $500
(3) $44,000

QUESTION 5 (14 marks) (continued)

Rough Work

This page is provided for your convenience but will not be marked.

Financial Tables

Table 2: PRESENT VALUE of $1.00 that is received in the future.

Period/ Percent	1.00%	1.50%	2.00%	2.50%	3.00%	3.50%	4.00%	4.50%	5.00%	5.50%	6.00%	6.50%	7.00%	7.50%	8.00%
1	0.990099	0.985222	0.980392	0.975610	0.970874	0.966184	0.961538	0.956938	0.952381	0.947867	0.943396	0.938967	0.934579	0.930233	0.925926
2	0.980296	0.970662	0.961169	0.951814	0.942596	0.933511	0.924556	0.915730	0.907029	0.898452	0.889996	0.881659	0.873439	0.865333	0.857339
3	0.970590	0.956317	0.942322	0.928599	0.915142	0.901943	0.888996	0.876297	0.863838	0.851614	0.839619	0.827849	0.816298	0.804961	0.793832
4	0.960980	0.942184	0.923845	0.905951	0.888487	0.871442	0.854804	0.838561	0.822702	0.807217	0.792094	0.777323	0.762895	0.748801	0.735030
5	0.951466	0.928260	0.905731	0.883854	0.862609	0.841973	0.821927	0.802451	0.783526	0.765134	0.747258	0.729881	0.712986	0.696559	0.680583
6	0.942045	0.914542	0.887971	0.862297	0.837484	0.813501	0.790315	0.767896	0.746215	0.725246	0.704961	0.685334	0.666342	0.647962	0.630170
7	0.932718	0.901027	0.870560	0.841265	0.813092	0.785991	0.759918	0.734828	0.710681	0.687437	0.665057	0.643506	0.622750	0.602755	0.583490
8	0.923483	0.887711	0.853490	0.820747	0.789409	0.759412	0.730690	0.703185	0.676839	0.651599	0.627412	0.604231	0.582009	0.560702	0.540269
9	0.914340	0.874592	0.836755	0.800728	0.766417	0.733731	0.702587	0.672904	0.644609	0.617629	0.591898	0.567353	0.543934	0.521583	0.500249
10	0.905287	0.861667	0.820348	0.781198	0.744094	0.708919	0.675564	0.643928	0.613913	0.585431	0.558395	0.532726	0.508349	0.485194	0.463193
11	0.896324	0.848933	0.804263	0.762145	0.722421	0.684946	0.649581	0.616199	0.584679	0.554911	0.526788	0.500212	0.475093	0.451343	0.428883
12	0.887449	0.836387	0.788493	0.743556	0.701380	0.661783	0.624597	0.589664	0.556837	0.525982	0.496969	0.469683	0.444012	0.419854	0.397114
13	0.878663	0.824027	0.773033	0.725420	0.680951	0.639404	0.600574	0.564272	0.530321	0.498561	0.468839	0.441017	0.414964	0.390562	0.367698
14	0.869963	0.811849	0.757875	0.707727	0.661118	0.617782	0.577475	0.539973	0.505068	0.472569	0.442301	0.414100	0.387817	0.363313	0.340461
15	0.861349	0.799852	0.743015	0.690466	0.641862	0.596891	0.555265	0.516720	0.481017	0.447933	0.417265	0.388827	0.362446	0.337966	0.315242
16	0.852821	0.788031	0.728446	0.673625	0.623167	0.576706	0.533908	0.494469	0.458112	0.424581	0.393646	0.365095	0.338735	0.314387	0.291890
17	0.844377	0.776385	0.714163	0.657195	0.605016	0.557204	0.513373	0.473176	0.436297	0.402447	0.371364	0.342813	0.316574	0.292453	0.270269
18	0.836017	0.764912	0.700159	0.641166	0.587395	0.538361	0.493628	0.452800	0.415521	0.381466	0.350344	0.321890	0.295864	0.272049	0.250249
19	0.827740	0.753607	0.686431	0.625528	0.570286	0.520156	0.474642	0.433302	0.395734	0.361579	0.330513	0.302244	0.276508	0.253069	0.231712
20	0.819544	0.742470	0.672971	0.610271	0.553676	0.502566	0.456387	0.414643	0.376889	0.342729	0.311805	0.283797	0.258419	0.235413	0.214548
21	0.811430	0.731498	0.659776	0.595386	0.537549	0.485571	0.438834	0.396787	0.358942	0.324862	0.294155	0.266476	0.241513	0.218989	0.198656
22	0.803396	0.720688	0.646839	0.580865	0.521893	0.469151	0.421955	0.379701	0.341850	0.307926	0.277505	0.250212	0.225713	0.203711	0.183941
23	0.795442	0.710037	0.634156	0.566697	0.506692	0.453286	0.405726	0.363350	0.325571	0.291873	0.261797	0.234941	0.210947	0.189498	0.170315
24	0.787566	0.699544	0.621721	0.552875	0.491934	0.437957	0.390121	0.347703	0.310068	0.276657	0.246979	0.220602	0.197147	0.176277	0.157699
25	0.779768	0.689206	0.609531	0.539391	0.477606	0.423147	0.375117	0.332731	0.295303	0.262234	0.232999	0.207138	0.184249	0.163979	0.146018
26	0.772048	0.679021	0.597579	0.526235	0.463695	0.408838	0.360689	0.318402	0.281241	0.248563	0.219810	0.194496	0.172195	0.152539	0.135202
27	0.764404	0.668986	0.585862	0.513400	0.450189	0.395012	0.346817	0.304691	0.267848	0.235605	0.207368	0.182625	0.160930	0.141896	0.125187
28	0.756836	0.659099	0.574375	0.500878	0.437077	0.381654	0.333477	0.291571	0.255094	0.223322	0.195630	0.171479	0.150402	0.131997	0.115914
29	0.749342	0.649359	0.563112	0.488661	0.424346	0.368748	0.320651	0.279015	0.242946	0.211679	0.184557	0.161013	0.140563	0.122788	0.107328
30	0.741923	0.639762	0.552071	0.476743	0.411987	0.356278	0.308319	0.267000	0.231377	0.200644	0.174110	0.151186	0.131367	0.114221	0.099377
31	0.734577	0.630308	0.541246	0.465115	0.399987	0.344230	0.296460	0.255502	0.220359	0.190184	0.164255	0.141959	0.122773	0.106252	0.092016
32	0.727304	0.620993	0.530633	0.453771	0.388337	0.332590	0.285058	0.244500	0.209866	0.180269	0.154957	0.133295	0.114741	0.098839	0.085200
33	0.720103	0.611816	0.520229	0.442703	0.377026	0.321343	0.274094	0.233971	0.199873	0.170871	0.146186	0.125159	0.107235	0.091943	0.078889
34	0.712973	0.602774	0.510028	0.431905	0.366045	0.310476	0.263552	0.223896	0.190355	0.161963	0.137912	0.117520	0.100219	0.085529	0.073045
35	0.705914	0.593866	0.500028	0.421371	0.355383	0.299977	0.253415	0.214254	0.181290	0.153520	0.130105	0.110348	0.093663	0.079562	0.067635
36	0.698925	0.585090	0.490223	0.411094	0.345032	0.289833	0.243669	0.205028	0.172657	0.145516	0.122741	0.103613	0.087535	0.074011	0.062625
37	0.692005	0.576443	0.480611	0.401067	0.334983	0.280032	0.234297	0.196199	0.164436	0.137930	0.115793	0.097289	0.081809	0.068847	0.057986
38	0.685153	0.567924	0.471187	0.391285	0.325226	0.270562	0.225285	0.187750	0.156605	0.130739	0.109239	0.091351	0.076457	0.064044	0.053690
39	0.678370	0.559531	0.461948	0.381741	0.315754	0.261413	0.216621	0.179665	0.149148	0.123924	0.103056	0.085776	0.071455	0.059576	0.049713
40	0.671653	0.551262	0.452890	0.372431	0.306557	0.252572	0.208289	0.171929	0.142046	0.117463	0.097222	0.080541	0.066780	0.055419	0.046031

Financial Tables

Table 4: PRESENT VALUE of Annuity of $1.00 in arrears.

Period/ Percent	1.00%	1.50%	2.00%	2.50%	3.00%	3.50%	4.00%	4.50%	5.00%	5.50%	6.00%	6.50%	7.00%	7.50%	8.00%
1	0.990099	0.985222	0.980392	0.975610	0.970874	0.966184	0.961538	0.956938	0.952381	0.947867	0.943396	0.938967	0.934579	0.930233	0.925926
2	1.970395	1.955883	1.941561	1.927424	1.913470	1.899694	1.886095	1.872668	1.859410	1.846320	1.833393	1.820626	1.808018	1.795565	1.783265
3	2.940985	2.912200	2.883883	2.856024	2.828611	2.801637	2.775091	2.748964	2.723248	2.697933	2.673012	2.648476	2.624316	2.600526	2.577097
4	3.901966	3.854385	3.807729	3.761974	3.717098	3.673079	3.629895	3.587526	3.545951	3.505150	3.465106	3.425799	3.387211	3.349326	3.312127
5	4.853431	4.782645	4.713460	4.645828	4.579707	4.515052	4.451822	4.389977	4.329477	4.270284	4.212364	4.155679	4.100197	4.045885	3.992710
6	5.795476	5.697187	5.601431	5.508125	5.417191	5.328553	5.242137	5.157872	5.075692	4.995530	4.917324	4.841014	4.766540	4.693846	4.622880
7	6.728195	6.598214	6.471991	6.349391	6.230283	6.114544	6.002055	5.892701	5.786373	5.682967	5.582381	5.484520	5.389289	5.296601	5.206370
8	7.651678	7.485925	7.325481	7.170137	7.019692	6.873956	6.732745	6.595886	6.463213	6.334566	6.209794	6.088751	5.971299	5.857304	5.746639
9	8.566018	8.360517	8.162237	7.970866	7.786109	7.607687	7.435332	7.268790	7.107822	6.952195	6.801692	6.656104	6.515232	6.378887	6.246888
10	9.471305	9.222185	8.982585	8.752064	8.530203	8.316605	8.110896	7.912718	7.721735	7.537626	7.360087	7.188830	7.023582	6.864081	6.710081
11	10.367628	10.071118	9.786848	9.514209	9.252624	9.001551	8.760477	8.528917	8.306414	8.092536	7.886875	7.689042	7.498674	7.315424	7.138964
12	11.255077	10.907505	10.575341	10.257765	9.954004	9.663334	9.385074	9.118581	8.863252	8.618518	8.383844	8.158725	7.942686	7.735278	7.536078
13	12.133740	11.731532	11.348374	10.983185	10.634955	10.302738	9.985648	9.682852	9.393573	9.117079	8.852683	8.599742	8.357651	8.125840	7.903776
14	13.003703	12.543382	12.106249	11.690912	11.296073	10.920520	10.563123	10.222825	9.898641	9.589648	9.294984	9.013842	8.745468	8.489154	8.244237
15	13.865053	13.343233	12.849264	12.381378	11.937935	11.517411	11.118387	10.739546	10.379658	10.037581	9.712249	9.402669	9.107914	8.827120	8.559479
16	14.717874	14.131264	13.577709	13.055003	12.561102	12.094117	11.652296	11.234015	10.837770	10.462162	10.105895	9.767764	9.446649	9.141507	8.851369
17	15.562251	14.907649	14.291872	13.712198	13.166118	12.651321	12.165669	11.707191	11.274066	10.864609	10.477260	10.110577	9.763223	9.433960	9.121638
18	16.398269	15.672561	14.992031	14.353364	13.753513	13.189682	12.659297	12.159992	11.689587	11.246074	10.827603	10.432466	10.059087	9.706009	9.371887
19	17.226008	16.426168	15.678462	14.978891	14.323799	13.709837	13.133939	12.593294	12.085321	11.607654	11.158116	10.734710	10.335595	9.959078	9.603599
20	18.045553	17.168639	16.351433	15.589162	14.877475	14.212403	13.590326	13.007936	12.462210	11.950382	11.469921	11.018507	10.594014	10.194491	9.818147
21	18.856983	17.900137	17.011209	16.184549	15.415024	14.697974	14.029160	13.404724	12.821153	12.275244	11.764077	11.284983	10.835527	10.413480	10.016803
22	19.660379	18.620824	17.658048	16.765413	15.936917	15.167125	14.451115	13.784425	13.163003	12.583170	12.041582	11.535196	11.061240	10.617191	10.200744
23	20.455821	19.330861	18.292204	17.332110	16.443608	15.620410	14.856842	14.147775	13.488574	12.875042	12.303379	11.770137	11.272187	10.806689	10.371059
24	21.243387	20.030405	18.913926	17.884986	16.935542	16.058368	15.246963	14.495478	13.798642	13.151699	12.550358	11.990739	11.469334	10.982967	10.528758
25	22.023156	20.719611	19.523456	18.424376	17.413148	16.481515	15.622080	14.828209	14.093945	13.413933	12.783356	12.197877	11.653583	11.146946	10.674776
26	22.795204	21.398632	20.121036	18.950611	17.876842	16.890352	15.982769	15.146611	14.375185	13.662495	13.003166	12.392373	11.825779	11.299485	10.809978
27	23.559608	22.067617	20.706898	19.464011	18.327031	17.285365	16.329586	15.451303	14.643034	13.898100	13.210534	12.574998	11.986709	11.441381	10.935165
28	24.316443	22.726717	21.281272	19.964889	18.764108	17.667019	16.663063	15.742874	14.898127	14.121422	13.406164	12.746477	12.137111	11.573378	11.051078
29	25.065785	23.376076	21.844385	20.453550	19.188455	18.035767	16.983715	16.021889	15.141074	14.333101	13.590721	12.907490	12.277674	11.696165	11.158406
30	25.807708	24.015838	22.396456	20.930293	19.600441	18.392045	17.292033	16.288889	15.372451	14.533745	13.764831	13.058676	12.409041	11.810386	11.257783
31	26.542285	24.646146	22.937702	21.395407	20.000428	18.736276	17.588494	16.544391	15.592811	14.723929	13.929086	13.200635	12.531814	11.916638	11.349799
32	27.269589	25.267139	23.468335	21.849178	20.388766	19.068865	17.873551	16.788891	15.802677	14.904198	14.084043	13.333929	12.646555	12.015478	11.434999
33	27.989693	25.878954	23.988564	22.291881	20.765792	19.390208	18.147646	17.022862	16.002549	15.075069	14.230230	13.459088	12.753790	12.107421	11.513888
34	28.702666	26.481728	24.498592	22.723786	21.131837	19.700684	18.411198	17.246758	16.192904	15.237033	14.368141	13.576609	12.854009	12.192950	11.586934
35	29.408580	27.075595	24.998619	23.145157	21.487220	20.000661	18.664613	17.461012	16.374194	15.390552	14.498246	13.686957	12.947672	12.272511	11.654568
36	30.107505	27.660684	25.488842	23.556251	21.832252	20.290494	18.908282	17.666041	16.546852	15.536068	14.620987	13.790570	13.035208	12.346522	11.717193
37	30.799510	28.237127	25.969453	23.957318	22.167235	20.570525	19.142579	17.862240	16.711287	15.673999	14.736780	13.887859	13.117017	12.415370	11.775179
38	31.484663	28.805052	26.440641	24.348603	22.492462	20.841087	19.367864	18.049990	16.867893	15.804738	14.846019	13.979210	13.193473	12.479414	11.828869
39	32.163033	29.364583	26.902589	24.730344	22.808215	21.102500	19.584485	18.229656	17.017041	15.928662	14.949075	14.064986	13.264928	12.538989	11.878582
40	32.834686	29.915845	27.355479	25.102775	23.114772	21.355072	19.792774	18.401584	17.159086	16.046125	15.046297	14.145527	13.331709	12.594409	11.924613