



VOTRE LIEN AVEC CE QUI COMPTE — CONNECTS YOU TO WHAT MATTERS

Mid Term Exam #2 (2^{1/2} hours = 150 minutes) Intermediate Financial Accounting I Winter 2018 ADM2342

(SUGGESTED SOLUTIONS)

Name: _____

ID#: _____

Instructions:

- Write your name and student ID number above. Display your student ID on your desk during the exam.
- Turn off all cell phones.
- This examination “**SUGGESTED SOLUTION**” comprises **4** questions over **16** numbered pages.
- Answer all questions in this booklet.
- The booklet is **not** to be removed from the examination room. You may not separate the pages.
- Do not answer questions using a pencil or erasable pen: if you do, you will forfeit your right to request a review of your exam.
- Limit your answer to the space provided. Blank space for rough work and supporting calculations are given at the end of each question. All supporting calculations **must** be shown.
- This exam will be marked out of 100 marks (for convenience) and is **2.5 hours (150 minutes)** long. You should budget approximately 1.5 minutes per mark. The exam is worth **35%** 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.
- Language (non-electronic) dictionaries are allowed but only after permission has been given by the proctors at the start of the examination.
- You **must** sign the Statement of Academic Integrity on page 2 of this exam.

Question			Marks
Q 1	Chapters 6, 7, 8	18 x 1 mark MCQs	/18
Q 2	Chapter 6	Part 1	/6
		Part 2	/7
		Part 2	/8
Q 3	Chapter 7	Part 1	/8
		Part 2	/6
		Part 3	/8
		Part 4	/7
		Part 5	/11
Q 4	Chapter 8	Part 1	/9
		Part 2	/6
		Part 3	/6
TOTAL			/100

Section	X
Section M: (Professor Conheady, Monday 11:30-1:00pm & Thursday 1:00-2:30pm)	<input type="checkbox"/>
Section N: (Professor Li, Tuesday & Thursday, 5:30-7:00pm)	<input type="checkbox"/>
Section P: (Professor Conheady, Monday 8:30-10:00am & Thursday 10:00-11:30am)	<input type="checkbox"/>

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.

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QUESTION 1 (18 marks)

Answer ALL parts of this question. Each part is independent. **Circle** the answer you choose. Choose only one answer per question.

Answers not provided in this document: please refer to the textbook for the answers.

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QUESTION 1 (18 marks) (continued)

Answer ALL parts of this question. Each part is independent. Circle the answer you choose. Choose only one answer per question.

Answers not provided in this document: please refer to the textbook for the answers.

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QUESTION 2 (21 marks)

Part 1 (6 marks)

Alpine sells forklifts to Cusco Ltd. Cusco places an order for 50 forklifts to take advantage of a volume discount. Cusco does NOT have storage space to store the forklifts; therefore, they request that Alpine store the forklifts and provide Alpine a delivery schedule.

Required

List the criteria that must be met before Alpine can recognized revenue on this transaction.

These revenue recognition criteria for a bill-and-hold transaction are:

1. Probability that delivery will be made
2. Item is on hand, identified, and ready for delivery to the buyer
3. The buyer specifically recognizes the deferred delivery instructions
4. The usual payment terms apply.

Part 2 (7 marks)

Flames Corp. contracted to build a bridge for \$5,000,000. Construction began in 2017 and was completed in 2018. Data relating to the construction are:

	2017	2018
Costs incurred during the year	\$1,620,000	\$1,400,000
Estimated costs to complete (at the end of the year)	\$1,380,000	\$0

Required

Using the percentage-of-completion method and the cost-to-cost basis,

- a) How much revenue should be reported for 2017? Show your calculation.
- b) Prepare the journal entry to record progress billings of \$1,700,000 during 2017.
- c) Prepare the journal entry to record the revenue and gross profit for 2017.
- d) How much gross profit should be reported for 2018? Show your calculation.

a)
$$\frac{\$1,620,000}{\$3,000,000} \times \$5,000,000 = \$2,700,000$$

b)

Accounts Receivable	1,700,000	
Contract Asset/Liability (or: CIP; or Billings on CIP).....		1,700,000

c)

Construction Expenses	1,620,000	
Contract Asset/Liability [or: Construction in Process (CIP)].....	1,080,000	
Revenue from Long-term Contracts		2,700,000

d)

Revenue.....	\$5,000,000
Less actual costs	<u>(3,020,000)</u>
Total gross profit.....	1,980,000
Recognized in 2017.....	<u>(1,080,000)</u>
Recognized in 2018.....	<u>\$ 900,000</u>

OR

Total revenue.....	\$5,000,000
Recognized in 2017.....	<u>(2,700,000)</u>
Recognized in 2018.....	2,300,000
Actual costs in 2018.....	<u>(1,400,000)</u>
Gross profit in 2018	<u>\$ 900,000</u>

QUESTION 2 (21 marks) (continued)

Part 3 (8 marks)

Organic Growth Company is presently testing a number of new agricultural seeds that it has recently harvested. To stimulate interest, it has decided to grant five of its largest customers the unconditional right to return these products if not fully satisfied. The right of return extends for four months. Organic Growth sells these seeds on account for \$1,500,000 (cost \$800,000) on April 2, 2017. Customers are required to pay the full amount due by June 15, 2017. The company follows IFRS.

Required

- Prepare the journal entry for Organic Growth at April 2, 2017, assuming Organic Growth estimates returns of 20% based on prior experience.
- Assume that one customer returns the seeds on June 1, 2017. Prepare the journal entry to record this transaction, assuming this customer purchased \$100,000 of seeds from Organic Growth.
- Briefly describe the accounting for these sales if Organic Growth is unable to reliably estimate returns.

(a) April 2, 2017

Accounts Receivable	1,500,000	
 Refund Liability (\$1,500,000 X 20%).....		300,000
 Sales Revenue		1,200,000
Estimated Inventory Returns.....	160,000*	
Cost of Goods Sold	640,000	
 Inventory		800,000
 * (20% X 800,000)		

(b) June 1, 2017

Refund Liability	100,000	
 Accounts Receivable		100,000
(Returned) Inventory	53,333*	
 Estimated Inventory Returns		53,333
 * (\$800,000 ÷ \$1,500,000) X \$100,000		

- (c) If Organic Growth is unable to estimate returns, it defers recognition of revenue until the return period expires on August 2, 2017.**

QUESTION 3 (40 marks)

Part 1 (8 marks)

On December 31, 2017, Green Company finished consultation services and accepted in exchange a promissory note with a face value of \$600,000, a due date of December 31, 2020, and a stated rate of 5%, with interest receivable at the end of each year. The fair value of the services is not readily determinable and the note is not readily marketable. Under the circumstances, the note is considered to have an appropriate imputed rate of interest (yield) of 10%.

The following interest factors are provided:

<u>Table Factors for Three Periods</u>	<u>Interest Rate</u>	
	<u>5%</u>	<u>10%</u>
Future Value of 1	1.15763	1.33100
Present Value of 1	.86384	.75132
Future Value of Ordinary Annuity of 1	3.15250	3.31000
Present Value of Ordinary Annuity of 1	2.72325	2.48685

Required (show all supporting calculations; provide an audit trail if you use a financial calculator)

- Prepare Green Company's journal entry to record the sale of its consultation services.
- Prepare a Schedule of Note Discount Amortization for Green Company under the effective interest method. (Round to whole dollars.)

**Green Company
Schedule of Note Discount Amortization**

Effective Interest Method

5% Note Discounted at 10% (Imputed)

<u>Date</u>	<u>Cash Interest (5%)</u>	<u>Effective Interest (10%)</u>	<u>Discount Amortized</u>	<u>Unamortized Discount Balance</u>	<u>Present Value of Note</u>
31/12/17				\$74,602	\$525,398
31/12/18	\$30,000	\$ 52,540	\$22,540	52,062	547,938
31/12/19	30,000	54,794	24,794	27,268	572,732
31/12/21	<u>30,000</u>	<u>57,268*</u>	<u>27,268</u>	0	600,000
	<u>\$90,000</u>	<u>\$164,602</u>	<u>\$74,602</u>		

*\$5 adjustment to compensate for rounding.

QUESTION 3 (40 marks) (continued)

Part 2 (6 marks)

Savannah Corp. sold property in exchange for a three-year note that has a maturity value of \$40,250 and no stated interest rate. The property originally cost Savannah \$21,000.

The following interest factors are provided:

<u>Table Factors for Three Periods</u>	<u>Interest Rate</u>	
	<u>5%</u>	<u>10%</u>
Future Value of 1	1.15763	1.33100
Present Value of 1	.86384	.75132
Future Value of Ordinary Annuity of 1	3.15250	3.31000
Present Value of Ordinary Annuity of 1	2.72325	2.48685

Required (show all supporting calculations; provide an audit trail if you use a financial calculator)

Assuming that a market interest rate (yield) of 5% is known, prepare the journal entry to record the sale of this property.

In this case, the proceeds from the sale are equal to the present value of the note.

**This is a non-interest-bearing note, so the only cash flow is the \$40,250 received in 3 period's time:
\$40,250 x .86384 = \$34,770.**

The entry to record the sale is:

Notes Receivable.....	34,770	
Property		21,000
Gain on Sale of Property (\$34,770 – \$21,000)		13,770

Part 3 (8 marks)

On December 31, 2017 Happy Auto Ltd. sells a car in exchange for \$4,000 cash and an installment note requiring payment of three equal annual installments of \$12,000 beginning December 31, 2018. Based on the duration of this agreement and Happy Auto Ltd.'s assessment of future interest rates and the customer's creditworthiness, Happy Auto Ltd. requires a 10% rate of return on this financing arrangement. Happy Auto Ltd. can borrow at 5% and its gross profit percentage on car sales is 20.00%.

Required (show all supporting calculations; provide an audit trail if you use a financial calculator)

- a) Prepare Happy Auto Ltd.'s journal entry to record its sale of the car on December 31, 2017.
- b) Prepare Happy Auto Ltd.'s journal entry on December 31, 2018.

a) December 31, 2017

Cash	4,000	
Note receivable	29,842	
Sales revenue		33,842
\$33,842 = \$4,000 + [PV Annuity, 3 installments, \$12,000 each, 10.00%].		
Cost of goods sold	27,074	
Inventory		27,074
\$27,074 = \$33,842 x (100% - 20.00% gross profit).		

b) December 31, 2018

Cash	12,000	
Note receivable		12,000
Note receivable	2,984	
Interest income		2,984

QUESTION 3 (40 marks) (continued)

Part 3 (8 marks) (continued)

Not required in your answer:

Date	10.00% x book (or, carrying) value of the note receivable.	Cash installment received.	Book (or, carrying) value of the note.
31 December, 2017			\$29,842
31 December, 2018	\$2,984	\$12,000	\$20,826 [20,826 = 29,842 - (12,000 - 2,984)].
31 December, 2019	\$2,083	\$12,000	\$10,909 [10,909 = 20,826 - (12,000 - 2,083)].
31 December, 2020	\$1,091	\$12,000	\$0 [0 = 10,909 - (12,000 - 1,091)].
Totals	\$6,158	\$36,000	

Note: \$6,158 = the interest received during the note's 3 years = \$36,000 - \$29,842.

Part 4 (7 marks)

Lute Retail Ltd. follows ASPE. The company transfers \$355,000 of its accounts receivable to Speedy Financing Ltd in a factoring (securitization) agreement on July 11, 2017, receiving 96% of the receivables balance as cash proceeds. Lute will continue to manage the customer accounts, including their collection. Lute estimates this obligation has a liability value of \$12,500. In addition, the agreement includes a with-recourse provision with an estimated value of \$9,900. The transaction is to be recorded as a sale.

Required

a) Prepare the journal entry on July 11, 2017, for Lute Retail Ltd. to record the factoring (securitization) of the receivables.

(a) Calculation of net proceeds:

Cash received (\$355,000 X 96%)		\$340,800
Less: Recourse obligation	\$9,900	
Less: Unrecovered Service Costs	<u>12,500</u>	<u>22,400</u>
Net proceeds		<u>\$318,400</u>

Calculation of gain or loss:

Carrying amount of receivables	\$355,000
Net proceeds	<u>318,400</u>
Loss on sale of receivables	<u>\$ 36,600</u>

The following journal entry would be made:

Cash.....	340,800	
Loss on Sale of Receivables.....	36,600	
Recourse Liability.....		9,900
Servicing Liability.....		12,500
Accounts Receivable.....		355,000

QUESTION 3 (40 marks) (continued)

Part 4 (9 marks) (continued)

b) Would the treatment of the transaction change if Lute Retail followed IFRS? Compare how ASPE and IFRS differ in how you determine if the receivables should be derecognized.

(b) **ASPE looks at control first. If control has been surrendered, the receivables can be derecognized even if there is still continuing involvement by Lute. Lute then uses *the financial components approach*.**

In this situation, Lute has transferred the receivables to ABC Financing Ltd (control transferred) and is acting in a servicing capacity. However, there is a recourse provision (see 2.i below). This suggests that it must pay amounts regardless of collection, so it wouldn't meet the definition of an asset transfer under IFRS.

The comments below are not required in your answer.

IFRS looks at whether the asset meets the criteria to be considered transferred. It assesses whether substantially all of the risks and rewards of ownership have been transferred. IFRS looks at control if it cannot be determined whether the risks and rewards have been transferred.

The receivable is considered transferred if:

- 1. The entity transfers the contractual rights to receive cash flows from the receivable; or**
- 2. Retains the contractual rights to receive cash flows from the receivable, but has a contractual obligation to pay the cash flows to one or more recipients. In addition, three conditions must be met:**
 - i. The entity has no obligation to pay amounts to the eventual recipients unless it collects equivalent amounts from the original receivable.**
 - ii. The entity is prohibited by the terms of the transfer contract from selling or pledging the original asset other than as security to the eventual recipients for the obligation to pay them cash flows.**
 - iii. The entity has an obligation to remit any cash flows collected on behalf of the eventual recipients without material delay.**

In this situation, Lute has transferred the receivables to ABS Financing Ltd (control transferred) and is acting in a servicing capacity. However, there is a recourse provision (see 2.i above). This suggests that it must pay amounts regardless of collection, so it wouldn't meet the definition of an asset transfer under IFRS.

If it is determined that Lute cannot derecognize the asset under IFRS, it would record the asset similar to a secured borrowing.

Note: While the journal entries were not requested for treatment as a secured borrowing (and not included in the textbook), the journal entries might look as follows:

On entering factoring (securitization) arrangement and receipt of cash:

Cash.....	340,800	
Securitization Liability		340,800
(96% x \$355,000 = \$340,800)		

On payment:

Interest expense.....	14,200	
Securitization Liability.....	340,800	
Accounts Receivable		355,000

This journal entry is for illustration purposes only. This example assumes collected amounts equal the book value of the receivables, payment made all at once (ie. 30 or so days later). If there was a period end during this time, interest would be accrued.

QUESTION 3 (40 marks) (continued)

Part 5 (11 marks)

The statement of financial position of Alice Inc. at December 31, 2016, includes the following:

Notes receivable	\$300,000
Accounts receivable	282,100
Less: Allowance for doubtful accounts	<u>(47,300)</u> \$534,800

Transactions in 2017 include the following:

1. Accounts receivable of \$146,000 were collected. This amount includes gross accounts of \$50,000 on which 2% sales discounts were allowed.
2. An additional \$16,700 was received in payment of an account that was written off in 2017.
3. Customer accounts of \$39,500 were written off during the year.
4. At year end, Allowance for Doubtful Accounts was estimated to need a balance of \$52,000. This estimate is based on an analysis of aged accounts receivable.

Required

Prepare all necessary journal entries for Alice Inc. to reflect the information above.

Cash	145,000	
Sales Discounts	1,000	
 Accounts Receivable		146,000
	-2-	
Accounts Receivable	16,700	
 Allowance for Doubtful Accounts		16,700
Cash	16,700	
 Accounts Receivable		16,700
	-3-	
Allowance for Doubtful Accounts	39,500	
 Accounts Receivable		39,500
	-4-	
Bad Debt Expense	27,500	
 Allowance for Doubtful Accounts		27,500
(\$47,300 + \$16,700 – \$39,500 = \$24,500;		
\$52,000 – \$24,500 = \$27,500)		

QUESTION 4 (21 marks)

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

Part 1 (9 marks)

The following inventory transactions took place for NPR Corporation for the month of May:

Date	Event	Quantity	Cost/Selling Price per unit
May 1	Beginning Inventory	1,000	\$3.55
May 5	Purchase	6,000	3.10
May 10	Purchase	2,000	3.75
May 15	Sale	3,000	6.00
May 20	Sale	2,000	6.00
May 22	Purchase	5,000	3.45
May 24	Purchase	2,000	3.75
May 25	Sale	7,000	6.00

Required

Calculate the ending inventory balance for NPR Corporation, assuming the company uses a periodic inventory system and the weighted average cost formula.

<u>Event</u>	<u>Quantity</u>	<u>× Unit Cost</u>	<u>=</u>	<u>Inventory Amount</u>
Beginning inventory	1,000	× \$3.55	=	\$ 3,550
purchase	6,000	× \$3.10	=	18,600
purchase	2,000	× \$3.75	=	7,500
purchase	5,000	× \$3.45	=	17,250
purchase	<u>2,000</u>	× \$3.75	=	<u>7,500</u>
Total	16,000			\$54,400

$$\text{Weighted Average Cost} = \$54,400 / 16000 = \$3.40$$

$$\text{Ending Quantity} = 1,000 + 6,000 + 2,000 - 3,000 - 2,000 + 5,000 + 2,000 - 7,000 = 4,000$$

$$\text{Ending Inventory Balance} = 4,000 \text{ units} * \$3.40 = \$13,600$$

QUESTION 4 (21 marks) (continued)

Part 2 (6 marks)

The controller of Utah Corp. has provided you with the following information relating to its inventory:

Date	Cost	Lower of cost and NRV
Dec 31/2017	\$457,000	\$410,000
Dec 31/2018	\$615,000	\$555,000

Utah uses the periodic inventory system, and records its inventory at cost. An allowance account is adjusted at the end of each year to adjust the value of the inventory to the lower of cost and NRV.

Required

Prepare the journal entries that Utah would have prepared for its 2017 and 2018 year ends, assuming that 2017 was its first year of operations.

December 2017:

Loss on Inventory Due to Decline in NRV.....	47,000	
Allowance to Reduce Inventory to NRV.....		47,000
To set up allowance to decrease inventory from cost to the lower of cost and NRV (\$457,000 – \$410,000 = \$47,000)		

December 2018:

Loss on Inventory Due to Decline in NRV.....	13,000	
Allowance to Reduce Inventory to NRV.....		13,000
To increase the balance in the allowance account by \$13,000 (\$615,000 – \$47,000) – \$555,000 = \$13,000.		
Allowance account now at \$60,000 Cr = difference between cost and NRV		

Part 3 (6 marks)

Woods’ Fruit Growers follows IFRS and began its apple-orchard operations on April 1, 2017, with the purchase of 220 apple trees for \$120,000. The company expects the orchard to have a ten year useful life before it will be replanted with new trees. The company completed the orchard’s first month of operations and has the following information at the end of April 2017:

Decrease in fair value of the apple trees due to disease and price changes	\$(14,000)
Apples harvested during April 2017 (at net realizable value)	\$2,500

Required

Prepare all necessary journal entries for Woods’ apple trees and the harvested apples for the month of April 2017.

1 April 2017	Bearer biological Assets—Apple Trees	120,000	
	Cash		120,000
To record purchase of the apple trees			
April 2017	Depreciation expense.....	1,000¹	
	Accumulated depreciation— Apple Trees		1,000
April 2017	Consumable Biological Assets...Apples Inventory	2,500	
	Unrealized Gain or Loss		2,500

¹ \$1,000 = \$120,000/10yrs/12months

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