

Mid Term Exam (SUGGESTED SOLUTIONS)
Intermediate Financial Accounting II
Winter 2014
ADM3340

Section M (Friday 4:00-7:00pm)

Name: _____

ID#: _____

Required:

- 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 **5** multi-part questions over **15** numbered pages. Answer all questions in this booklet. 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 the right to ask that your exam be remarked.
- Limit your answer to the space provided. Blank sheets for rough work and supporting calculations are given at the end of each question.
- This exam will be marked out of **84** marks (for convenience) and is 2½ hours long. You should budget approximately **1.5** minutes per mark. The exam is worth 40% 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.
- This exam paper must remain stapled: do not take this exam paper apart.
- Present value tables are provided on pages **14 and 15**.
- Language (non-electronic) dictionaries are allowed with the proctor’s permission.
- You **must** sign the Statement of Academic integrity on page 2 of this exam.

	Question		Marks
Ch 12	1: part 1	Goodwill & intangibles; acquisition, amortization, impairment, ASPE & IFRS	/12
	1: part 2	Intangibles: definitions	/6
Ch 13	2: part 1	Warranties	/7
	2: part 2	Promotions/premiums	/9
Ch 14	3: part 1	Bond liabilities: issuance	/10
	3: part 2	Bond liabilities: retirement	/12
	3: part 3	Troubled debt restructuring	/12
Ch 15	4: part 1	Retained earnings	/4
	4: part 2	Dividends	/6
	4: part 3	Treasury stock	/6
	TOTAL		/84

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 (18 marks)

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

PART 1: (12 marks)**Question 1**

Meridan Golf and Sports was formed on July 1, 2014, when Steve Powerdriver purchased Old Master Golf Corporation. Old Master provides video golf instruction at kiosks in shopping malls. Powerdriver's plan is to make the instruction business part of his golf equipment and accessory stores. Powerdriver paid \$650,000 cash for Old Master. At the time of purchase, Old Master's balance sheet reported assets of \$550,000 and liabilities of \$100,000 (shareholders' equity was \$450,000). The fair value of Old Master's identifiable assets was estimated to be \$700,000 and the fair value of the liabilities was estimated to be \$100,000. Included in the identifiable assets was the Old Master trade name with a fair value of \$15,000 and a copyright on some instructional books with a fair value of \$25,000. The trade name had a remaining legal life of five years and can be renewed indefinitely at nominal cost. The copyright had a remaining life of 40 years. Meridan Golf and Sports' accounting year-end is December 31.

Required

Assume that Meridan Golf and Sports is a private company reporting under ASPE.

- a) Prepare the intangible assets section of Meridan Golf and Sports at December 31, 2015. (No impairment needs to be recorded in 2015.) Show all supporting calculations. (6 marks)
- (a) **The Copyright is a limited life intangible asset. There is no amortization for the goodwill or the trade name, which are considered indefinite life intangibles.**

Meridan Golf and Sports
INTANGIBLES SECTION OF BALANCE SHEET
December 31, 2015

Trade name	\$ 15,000
Copyright (net of accumulated amortization of \$938) (Schedule 1)	24,062
Goodwill	<u>50,000</u>
Total intangibles	<u>\$89,062</u>

Schedule 1 Calculation of Copyright

Cost of Copyright at date of purchase	\$25,000
Amortization of Copyright for 2014, 2015	
[(\$25,000 ÷ 40) X 1.5 years]	<u>(938)</u>
Book value of copyright at December 31	<u>\$24,062</u>

Schedule 2 Goodwill Measurement

Fair value of consideration transferred		\$650,000
Fair value of identifiable assets	\$700,000	
Fair value of identifiable liabilities	<u>(100,000)</u>	
Fair value of net identifiable assets		<u>600,000</u>
Value assigned to goodwill		<u>\$50,000</u>

QUESTION 1 (18 marks)

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

PART 1: (12 marks)

b) At the end of 2016, Powerdriver is evaluating the results of the instructional business. Due to fierce competition from Internet sites and television, the Old Master reporting unit has been losing money and has a carrying amount (including goodwill) of \$450,000 and fair value (including goodwill) of \$430,000. Powerdriver has collected the following information about the company's intangible assets:

Intangible Asset	Expected Cash Flows (Undiscounted)	Fair Value
Trade name	\$11,000	\$ 8,000
Copyright	30,000	25,000

Prepare the required journal entries, if any, to record impairment on Meridan's intangible assets. (Assume that amortization for 2016 has been recorded.) Show supporting calculations. (3 marks)

(b)

Loss on Impairment (Goodwill).....	13,000	
Loss on Impairment- Trade Names.....	7,000	
Acc Impairment Losses (Goodwill)		13,000
Acc Impairment Losses- Trade Names		7,000

Calculations follow in Schedule 3

Schedule 3

Indefinite-life intangibles and goodwill:

	Carrying value	Fair value	Impairment
Trade Name	15,000	8,000	7,000
Reporting Unit (including Goodwill)	450,000 (7,000) \$443,000	430,000	13,000

Schedule 4

Limited-life intangibles:

	Carrying value	Undiscounted cash flows
Copyright	23,438 (\$25,000 - [\$25,000 / 40 years * 2.5 years])	30,000
No impairment		

QUESTION 1 (18 marks)

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

PART 1: (12 marks)

c) Assume instead that Meridan Golf and Sports is a public company following IFRS. The relevant information for the impairment test on December 31, 2016, is as follows:

	Carrying Amount	Future Net Cash Flows (Undiscounted)	Value in Use*	FV – Selling Costs
Trade name	15,000	11,000	7,000	7,500
Copyright	23,438	30,000	27,000	24,000
Cash-generating unit to which goodwill was allocated	450,000	470,000	440,000	420,000

*Value in Use = Future Net Cash Flows (discounted)

Provide the calculations for any necessary impairment tests and any associated journal entries. (3 marks)

	Carrying amount	Recoverable Amount (higher of VIU or FV-SC)	Impairment
Trade Name	15,000	7,500	7,500
Copyright	23,438	27,000	0
Cash generating unit to which Goodwill was allocated	450,000 (7,500) 442,500	440,000	2,500

Under IFRS the impairment test for the net identifiable assets would be performed first, and then the carrying amount of the CGU would be compared to its recoverable amount. The result, if the carrying amount > the recoverable amount, would be the impairment loss – first assigned to goodwill with any remainder then allocated among the other assets on a relative book value basis.

Loss on Impairment (Goodwill).....	2,500	
Loss on Impairment - Trade Names.....	7,500	
Acc Impairment Losses (Goodwill)		2,500
Acc Impairment Losses- Trade Names.....		7,500

Question 1 (18 marks) (continued)

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

PART 2: (6 marks)

Provide clear, concise answers for the following.

a) What are intangible assets? (3 marks)

b) What are the six specific conditions that need to be demonstrated in order to capitalize costs incurred in the development phase? (3 marks)

[Solution \(see also pages 737 & 742 in Kieso et al, 10th Can Ed.\)](#)

- (a) Intangible assets are assets that are:
1. individually identifiable (results from contractual or other legal rights, or can be separated or divided from the entity and sold, transferred, rented, or exchanged);
 2. have a non-physical existence; and
 3. are non-monetary in nature.
- (b)
1. **Technical feasibility of completing the intangible asset**
 2. **The entity's intention to complete it for use or sale**
 3. **The entity's ability to use or sell it**
 4. **Availability of technical, financial, and other resources needed to complete it, and to use or sell it**
 5. **The way in which the future economic benefits will be generated; including the existence of a market for the asset if it will be sold, or its usefulness to the entity if it will be used internally**
 6. **The ability to reliably measure the costs associated with and attributed to the intangible asset during its development**

QUESTION 2 (16 marks)**Answer ALL parts to this question. Each part is independent.****PART 1: (7 marks)**

Echo Corporation manufactures a line of amplifiers that carry a three-year warranty. Based on experience, the estimated warranty costs related to dollar sales are as follows: first year after sale – 2% of sales; second year after sale – 3% of sales; and third year after sale – 4% of sales. Sales and actual warrant expenditures for the first three years of business were:

	Sales	Actual Warranty Expenditures
2012	\$ 810,000	\$ 6,500
2013	1,070,000	67,200
2014	1,036,000	162,000

Required (show all supporting calculations)

Assume that all sales are made evenly throughout each year and that warranty expenditures are also evenly spaced according to the rates above. Echo Corporation uses the expense approach when accounting for its warranties.

- Calculate the amount Echo Corporation should report as a warranty expense on its 2014 income statement.
- Calculate the amount Echo Corporation should report as a warranty liability on its December 31, 2014 balance sheet.

(a) Estimated warranty expense for 2014:

$$\text{On 2014 sales: } \$1,036,000 \times .09^* = \underline{\underline{\$ 93,240}}$$

* (2% of sales first year + 3% of sales second year + 4% of sales third year = 9% of sales)

Estimated warranty costs:

On 2012 sales \$ 810,000 X .09	\$ 72,900
On 2013 sales \$1,070,000 X .09	96,300
On 2014 sales \$1,036,000 X .09	<u>93,240</u>
Total estimated costs	262,440
Total warranty expenditures	<u>235,700*</u>
Balance of liability, 31/12/14	<u><u>\$26,740</u></u>

*2012—\$6,500; 2013—\$67,200, and 2014—\$162,000.

The liability account has a balance of \$26,740 at 31/12/14 based on the difference between the estimated warranty costs (totaling \$262,440) for the three years' sales and the actual warranty expenditures (totaling \$235,700) during that same period.

QUESTION 2 (16 marks)

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

PART 2: (9 marks)

In 2014 Ovechkin Corporation sold 700,000 boxes of pies mix under a new sales promotion program. Each box contains one coupon that entitles the customer to a baking pan when the coupon is submitted with an additional \$4.75 from the customer. Ovechkin pays \$5.00 per pan and \$1.25 for shipping and handling. Ovechkin estimates that 60% of the coupons will be redeemed even though only 105,000 coupons had been processed during 2014. Each box of pie mix is sold for \$4.50 and Ovechkin estimates that \$1.00 of the \$4.50 sale price relates to the baking pan to be awarded. Ovechkin follows IFRS and accounts for its promotional programs in accordance with the revenue approach.

Required (show all supporting calculations)

Prepare any necessary 2014 journal entries for Ovechkin Corporation to record revenue, the liability, and coupon redemptions.

	3,150,000	
Cash		
Sales Revenue (700,000 X \$3.50)		2,450,000
Unearned Revenue (700,000 x \$1.00)		700,000
Cash (105,000 X \$4.75)	498,750	
Premium Expense (105,000 X [\$5.00 + \$1.25 - \$4.75]).....	157,500	
Inventory of Baking Pans (105,000 X \$5.00)		525,000
Cash/Accounts Payable (105,000 X \$1.25)		131,250
Unearned Revenue (700,000 X \$1.00 X 25%*).....	175,000	
Sales Revenue		175,000
*105,000/(60% x 700,000) = 25%		

The calculations below are not required in your answer:

Boxes sold		700,000
Sale price per unit related to premium		<u>X \$1.00</u>
Unearned revenue recorded in 2014		<u>\$700,000</u>
Total coupons expected to be redeemed (700,000 x 60%)		420,000
Less: coupons redeemed during 2014		<u>105,000</u>
Coupons still to be redeemed, 31/12/14		315,000
Total coupons expected to be redeemed		÷ <u>420,000</u>
% of unearned revenue to be earned after 2014		<u>75%</u>
Unearned revenue recorded in 2014		\$700,000
% of unearned revenue to be earned after 2014		<u>X 75%</u>
Unearned revenue (adjusted), 31/12/14		<u>\$525,000</u>
Total coupons redeemed in 2014		105,000
Cost per redemption [(\$5.00 + \$1.25) – \$4.75]		<u>\$1.50</u>
Premium expense		<u>\$157,500</u>

QUESTION 3 (34 marks)

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

PART 1: (10 marks)

On June 1, 2013 BondBeagle Inc. issues \$3,000,000 face value bonds. The bond date is March 31, 2013, and the bonds carry a coupon rate of 8% per year, payable semi-annually on March 31 and September 30. The bonds' maturity date is March 31, 2033. The bonds provide an annual yield of 6%.

BondBeagle Inc. uses the effective interest rate method to amortize any bond premium or discount. BondBeagle Inc.'s accounting year-end is April 30.

Required

Present the journal entry to record the issuance of the bonds: show all supporting calculations.

Intro	INPUT	Text	Date Tables	Issuance Calc	Issuance	I1	I2	I3	I4	I5	Retireme
		B	C		D		E				
2	June 01, 2013	Date of issuance			Dr						Cr
3											
4											
5	Cash					3,730,380.40					
6		Interest payable									40,000.00
7		Bonds payable									3,000,000.00
8		Bond premium									690,380.40
9											

To record the issuance of 20.00-year bonds, face value \$3,000,000, stated interest rate 8.0000% per annum. The bond date is March 30, 2013 with interest paid semi-annually. There are 238 months (including 40 interest payments) between the bond's issuance and maturity dates. For details of how this journal entry's amounts are determined, please refer to the ISSUANCE_CALC sheet.

The following table is not required in your solution:

	If the bonds were issued on:	
	March 31, 2013	September 30, 2013
	There would be 40 semi-annual interest payments (240 months) between March 31, 2013 and the maturity date, March 30, 2033	There would be 39 semi-annual interest payments (234 months) between September 30, 2013 and the maturity date, March 30, 2033
Present value of the bond's 40.00 semi-annual interest payments of \$120,000 (= \$3,000,000 x 8.0000%/2) at 3.0000% effective interest rate [\$2,773,772 = 23.11477 x \$120,000]	2,773,772.40	
Present value of the maturity value of \$3,000,000 at the end of 40.00 periods at 3.0000% effective interest rate [\$919,680 = 0.30656 x \$3,000,000]	919,680.00	
Present value of the bond's 39.00 semi-annual interest payments of \$120,000 (= \$3,000,000 x 8.0000%/2) at 3.0000% effective interest rate [\$2,736,986 = 22.80822 x \$120,000]		2,736,986.40
Present value of the maturity value of \$3,000,000 at the end of 39.00 periods at 3.0000% effective interest rate [\$947,250 = 0.31575 x \$3,000,000]		947,250.00
Total		
	3,693,452.40	3,684,236.40
Bond proceeds, excluding any accrued interest and issuance cost, on June 01, 2013 (which lies between March 31, 2013 and September 30, 2013). \$3,690,380 = \$3,693,452 + {[(3,684,236 - 3,693,452)/6months] x 2months}		3,690,380.40

Question 3 (34 marks) (continued)

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

PART 2: (12 marks)

On June 1, 2013 BondBeagle Inc. issues \$10,000,000 face value bonds. The bond date is January 1, 2013, and the bonds carry a coupon rate of 4% per year, payable semi-annually on January 1 and July 1. The bonds' maturity date is **January 1, 2043**. Proceeds upon issuance, excluding accrued interest, were \$5,491,145, and the bonds provide an annual yield of 8%.

BondBeagle Inc. uses the effective interest rate method to amortize any bond premium or discount. On May 31, 2028 BondBeagle Inc. retires 60% of the bonds at 103%, excluding accrued interest. BondBeagle Inc.'s accounting year-end is April 30.

Required

Present all necessary journal entries for the retired bonds on May 31, 2028. Show all supporting calculations.

To answer this question you must first determine the amortized cost (carrying value) of the bond at January 2, 2028 (shown as \$1,844,278 below).

Jan 2, 2028 to Jan 1, 2043: 30 interest pymt periods remaining periods to maturity.

\$200,000 x 17.292033 = \$3,458,406

\$10,000,000 x 0.3083187 = 3,083,187

Amortized cost at Jan 2, 2028 = \$6,541,593 (rounded)

Intro	INPUT	Text	Date	Tables	Issuance	Calc	Issuance	I1	I2	I3	I4	I5	Retirement	R1	R2	R3	R4	R5	Maturity	Amort
2																				
3																				
4																				
5																				
6																				
7																				
8																				

Date of retirement

May 31, 2028

Dr **Cr**

Interest expense 26,166.37

Bond discount 6,166.37

Interest payable 20,000.00

Instructions:
Enter your data in the INPUT screen; all other screens are "Output screens".

Calculations:
= \$6,541,593 (net bond liability at beginning of January 02, 2028) x 4.000000% (semi-annual yield) x 1/6 months x 60.0000% retired.
= \$26,166 - \$20,000
= \$10,000,000 x 60.0000% retired x 1/12 months x 4.0000%

To record interest expense incurred on 60.0000% of the bonds between April 30, 2028 (the closest preceding accounting year-end date to the retirement date) and May 31, 2028. Effective interest rate method.
[Note: May 31, 2028 is neither an accounting year-end or a bond interest payment anniversary date.]

12	Loss on retirement		2,224,212.13																	
13	Interest payable		100,000.00																	
14	Bond payable		6,000,000.00																	
15	Bond discount			2,044,212.13																
16																				
17	Cash				6,280,000.00															
18																				
19	To record the retirement at 103.0000% of 30.00 year 4.0000% bonds, issued June 01, 2013, face value \$6,000,000.																			
20	BondBeagle Copyright 2004-2013 Brian Conheady. All Rights Reserved.																			

Calculations:
= (\$6,280,000 - \$100,000 + \$2,044,212) - (\$6,000,000)
= \$20,000 (see above journal entry) + \$80,000 (= \$10,000,000 x 60.0000% retired x 4/12 months x 4.0000% accrued at April 30, 2028) January 01, 2028 is the closest preceding interest payment date to the date of retirement.
= \$10,000,000 x 60.0000% retired
= \$3,458,407 x 60.00% (unamortized at beginning of January 02, 2028) - \$30,832 [\$30,832 = (\$6,541,593 x 4.000000% yield x 5/6 x 60.00%) - (\$10,000,000 x 2.0000% interest paid x 5/6 x 60.00%) amortization, January 01, 2028 to May 31, 2028 on the 60.00% retired].
January 01, 2028 is the closest preceding interest payment date to the date of retirement.
= \$6,180,000 (= \$10,000,000 x 60.0000% x 103.0000%) + \$20,000 accrued (as appears in the journal entry above) + \$80,000 accrued at April 30, 2028

Question 3 (34 marks) (continued)

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

PART 3: (12 marks)

On 1/1/2011 Magic Messi Inc. issued a 5 year 10% \$1,000,000 bond payable to the Bank of Dreams. Interest payment dates are June 30 and December 31 and the bonds were issued to provide an annual yield of 12%. By December 2013 Magic Messi Inc. is in financial difficulties and is about to miss the 31/12/2013 interest payment. Magic Messi Inc. negotiates an agreement with the Bank of Dreams whereby the Bank agrees to waive the 31/12/2013 interest payment and to replace, effective 31/12/2013, the above bond with an 8 year \$800,000 bond bearing 14% annual interest, payable semi-annually. Due to Magic Messi Inc.'s precarious situation, lenders would normally seek a 20% annual return on this 'bail-out' financing.

Required

- (a) Is this troubled debt restructuring a *settlement* or a *modification*? Support your answer with all necessary calculations.
- (b) Answer either i or ii:
 - i If in part (a) you deem this restructuring to be a *settlement* provide any journal entries on Magic Messi Inc's books that may be necessary on 31/12/2013.
 - ii If in part (a) you deem this restructuring to be a *modification*, what is the total of the interest expense that will be recognized by Magic Messi Inc. during the 8 year life of the \$800,000 bond.

Step 1					
PV of the old 5 year bond at 31/12/2013, using the old bond's historic 6% semi-annual yield:					
PVA, 4 periods, 6%, \$50,000	\$ 50,000	6.00%	4	3.465105613	\$173,255
PV, 4 periods, 6%, \$1,000,000	\$ 1,000,000	6.00%	4	0.792093663	792,094
					965,349
31/12/2013 interest payment					50,000
PV of old debt owed at 31/12/2013, using the old bond's historic 6% semi-annual yield:					\$1,015,349
PV of the new 8 year bond at 31/12/2013, using the old bond's historic 6% semi-annual yield:					
PVA, 16 periods, 6%, \$56,000	\$ 56,000	6.00%	16	10.105895271	\$565,930
PV, 16 periods, 6%, \$800,000	\$ 800,000	6.00%	16	0.393646284	314,917
PV of new debt at 31/12/2013, using the old bond's historic 6% semi-annual yield:					\$880,847

Step 2
 Difference (\$1,015,349 - \$880,847) \$134,502
 Difference as a percentage of \$1,015,349 13.25%
 Greater than 10% [see CICA Handbook, Section 3856.A52 and IFRS 9.B3.3.6] and thus this is a 'settlement' and the old bond is derecognized.

Step 3					
As this is a 'settlement' calculate the PV of the new bond using the prevailing 10% required semi-annual rate of return for bonds with similar risk and maturity.					
PV of the new 8 year bond at 31/12/2013, using the prevailing rate of return for bonds with similar risk and maturity:					
PVA, 16 periods, 10%, \$56,000	\$ 56,000	10.00%	16	7.823708642	\$438,128
PV, 16 periods, 10%, \$800,000	\$ 800,000	10.00%	16	0.217629136	174,103
PV of new debt at 31/12/2013, using the prevailing 10% required semi-annual rate of return for bonds with similar risk and maturity.					\$612,231
Face value of the new 8 year bond:					800,000
Therefore, bond discount is:					\$187,769
31/12/2013 J/E to record the bond restructuring					
	Dr		Cr		
(Old) Bond payable	1,000,000				
(Old) Bond discount			34,651		[= \$1,000,000 - \$965,349 (PV of the old 5 year bond at 31/12/2013, using the old bond's historic 6% semi-annual yield:)]
Interest payable		50,000			
(New) Bond discount		187,769			
(New) Bond payable			800,000		
Gain on bond restructuring			403,118		

This amortization table (assumes semi-annual interest payments) is not required:

Beginning of period	Face value	Bond discount	Beginning of period amortized cost	7% interest paid per 6 months	10% interest expense per 6 months	Bond discount amortization	End of period amortized cost	End of period
31-Dec-13	800,000	187,769	612,231	56,000	61,223	5,223	617,454	30-Jun-14 1
30-Jun-14	800,000	182,546	617,454	56,000	61,745	5,745	623,200	31-Dec-14 2
31-Dec-14	800,000	176,800	623,200	56,000	62,320	6,320	629,519	30-Jun-15 3
30-Jun-15	800,000	170,481	629,519	56,000	62,952	6,952	636,471	31-Dec-15 4
31-Dec-15	800,000	163,529	636,471	56,000	63,647	7,647	644,119	30-Jun-16 5
30-Jun-16	800,000	155,881	644,119	56,000	64,412	8,412	652,530	31-Dec-16 6
31-Dec-16	800,000	147,470	652,530	56,000	65,253	9,253	661,783	30-Jun-17 7
30-Jun-17	800,000	138,217	661,783	56,000	66,178	10,178	671,962	31-Dec-17 8
31-Dec-17	800,000	128,038	671,962	56,000	67,196	11,196	683,158	30-Jun-18 9
30-Jun-18	800,000	116,842	683,158	56,000	68,316	12,316	695,474	31-Dec-18 10
31-Dec-18	800,000	104,526	695,474	56,000	69,547	13,547	709,021	30-Jun-19 11
30-Jun-19	800,000	90,979	709,021	56,000	70,902	14,902	723,923	31-Dec-19 12
31-Dec-19	800,000	76,077	723,923	56,000	72,392	16,392	740,316	30-Jun-20 13
30-Jun-20	800,000	59,684	740,316	56,000	74,032	18,032	758,347	31-Dec-20 14
31-Dec-20	800,000	41,653	758,347	56,000	75,835	19,835	778,182	30-Jun-21 15
30-Jun-21	800,000	21,818	778,182	56,000	77,818	21,818	800,000	31-Dec-21 16
			Totals	896,000	1,083,769	187,769		

If this restructuring were deemed a modification then the total of the interest expense that will be recognized by Magic Messi Inc. during the 8 year life of the \$800,000 bond is \$680,651.

Total interest expense if the restructuring were deemed a <i>settlement</i> (as above)	1,083,769
Gain on <i>settlement</i>	403,118
Total interest expense if the restructuring were (incorrectly) deemed a <i>modification</i>	680,651

Or: \$680,651 = interest paid of \$896,000 [\$800,000 x 7.00% x 16] less the total \$215,349 amortization [\$1,015,349 - \$800,000] that would appear on the post-modification amortization table.

QUESTION 4 (16 marks)

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

PART 1: (4 marks)

a) What are the items that increase retained earnings?

Items that increase retained earnings are:

- net income,
- prior period adjustments (error corrections),
- financial reorganization, and
- certain changes in accounting principle.

b) What are the items that decrease retained earnings?

Items that decrease retained earnings are:

- net loss,
- cash, property and most stock dividends,
- some treasury shares transactions,
- prior period adjustments (error corrections), and
- certain changes in accounting principle.

PART 2: (6 marks)

In each of the following independent cases, it is assumed that the corporation has outstanding 20,000, \$0.80, preferred shares, with a carrying value of \$200,000, and 80,000 common shares, with a carrying value of \$800,000. No dividends have been declared for 2011 or 2012.

- a) At December 31, 2013, the board of directors wants to distribute \$125,000 in dividends. How much will the preferred shareholders receive if their shares are cumulative and non-participating? Show all supporting calculations.
- b) At December 31, 2013, the board of directors wants to distribute \$210,000 in dividends. How much will the preferred shareholders receive if their shares are cumulative and participating up to a 15% return in total? Show all supporting calculations.
- c) On December 31, 2013, the preferred shareholders received an \$80,000 dividend on their shares, which are cumulative and fully participating. How much money was distributed in total for dividends to the preferred and common shares? Show all supporting calculations.

(a) Preferred: \$48,000. $[(\$0.80 \times 20,000) \times 2 \text{ yrs arrearages}] + [(\$0.80 \times 20,000) \text{ for 2013}]$.

Common: \$77,000 = \$125,000 - \$48,000. Not Asked.

(b) Preferred: \$62,000 = $[(\$0.80 \times 20,000) \times 2 \text{ yrs arrearages}] + (\$200,000 \times 15\%)$.

Common: \$148,000 = \$210,000 - \$62,000. [\$148,000 is an 18.5% return on \$800,000]. Not Asked.

(c) \$272,000 (\$192,000 to common and \$80,000 to preferred: Not Asked).

- $\$80,000 - [(\$0.80 \times 20,000) \times 2 \text{ yrs arrearages}] = \$48,000$;
- $\$48,000 / \$200,000 = 24\%$.
- $24\% \times (\$200,000 + \$800,000) = \$240,000$;
- Total dividend declared = $\$240,000 + [(\$0.80 \times 20,000) \times 2 \text{ yrs arrearages}] = \$272,000$.

Question 4 (16 marks) (continued)

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

PART 3: (6 marks)

Gryba Corporation's last year-end balance sheet reported the following in its shareholders' equity section:

Common shares, no par, outstanding 5,000 shares	\$115,000
Retained earnings	200,000

The following transactions occurred this year:

- (a) Purchased 70 common shares at \$30 per share, to be held as treasury shares.
- (b) Sold 60 of the treasury shares at \$32 per share.
- (c) Sold the remaining treasury shares at \$15 per share.

Required

Prepare Gryba Corporation's journal entries for these transactions.

(a) Treasury Shares (70 x \$30)	2,100	
Cash		2,100
(b) Cash (60 x \$32)	1,920	
Treasury Shares (60 x \$30)		1,800
Contributed Surplus		120
(c) Cash (10 x \$15)	150	
Contributed Surplus	120	
Retained Earnings	30	
Treasury Shares (10 x \$30)		300

Financial Tables

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

Period/Per	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	11%	12%
1	0.9900990	0.9803922	0.9708738	0.9615385	0.9523810	0.9433962	0.9345794	0.9259259	0.9174312	0.9090909	0.9009009	0.8928571
2	0.9802960	0.9611688	0.9425959	0.9245562	0.9070295	0.8899964	0.8734387	0.8573388	0.8416800	0.8264463	0.8116224	0.7971939
3	0.9705901	0.9423223	0.9151417	0.8889964	0.8638376	0.8396193	0.8162979	0.7938322	0.7721835	0.7513148	0.7311914	0.7117802
4	0.9609803	0.9238454	0.8884870	0.8548042	0.8227025	0.7920937	0.7628952	0.7350299	0.7084252	0.6830135	0.6587310	0.6355181
5	0.9514657	0.9057308	0.8626088	0.8219271	0.7835262	0.7472582	0.7129862	0.6805832	0.6499314	0.6209213	0.5934513	0.5674269
6	0.9420452	0.8879714	0.8374843	0.7903145	0.7462154	0.7049605	0.6663422	0.6301696	0.5962673	0.5644739	0.5346408	0.5066311
7	0.9327181	0.8705602	0.8130915	0.7599178	0.7106813	0.6650571	0.6227497	0.5834904	0.5470342	0.5131581	0.4816584	0.4523492
8	0.9234832	0.8534904	0.7894092	0.7306902	0.6768394	0.6274124	0.5820091	0.5402689	0.5018663	0.4665074	0.4339265	0.4038832
9	0.9143398	0.8367553	0.7664167	0.7025867	0.6446089	0.5918985	0.5439337	0.5002490	0.4604278	0.4240976	0.3909248	0.3606100
10	0.9052870	0.8203483	0.7440939	0.6755642	0.6139133	0.5583948	0.5083493	0.4631935	0.4224108	0.3855433	0.3521845	0.3219732
11	0.8963237	0.8042630	0.7224213	0.6495809	0.5846793	0.5267875	0.4750928	0.4288829	0.3875329	0.3504939	0.3172833	0.2874761
12	0.8874492	0.7884932	0.7013799	0.6245970	0.5568374	0.4969694	0.4440120	0.3971138	0.3555347	0.3186308	0.2858408	0.2566751
13	0.8786626	0.7730325	0.6809513	0.6005741	0.5303214	0.4688390	0.4149644	0.3676979	0.3261786	0.2896644	0.2575143	0.2291742
14	0.8699630	0.7578750	0.6611178	0.5774751	0.5050680	0.4423010	0.3878172	0.3404610	0.2992465	0.2633313	0.2319948	0.2046198
15	0.8613495	0.7430147	0.6418619	0.5552645	0.4810171	0.4172651	0.3624460	0.3152417	0.2745380	0.2393920	0.2090043	0.1826963
16	0.8528213	0.7284458	0.6231669	0.5339082	0.4581115	0.3936463	0.3387346	0.2918905	0.2518698	0.2176291	0.1882922	0.1631217
17	0.8443775	0.7141626	0.6050164	0.5133732	0.4362967	0.3713644	0.3165744	0.2702690	0.2310732	0.1978447	0.1696326	0.1456443
18	0.8360173	0.7001594	0.5873946	0.4936281	0.4155207	0.3503438	0.2958639	0.2502490	0.2119937	0.1798588	0.1528222	0.1300396
19	0.8277399	0.6864308	0.5702860	0.4746424	0.3957340	0.3305130	0.2765083	0.2317121	0.1944897	0.1635080	0.1376776	0.1161068
20	0.8195445	0.6729713	0.5536758	0.4563869	0.3768895	0.3118047	0.2584190	0.2145482	0.1784309	0.1486436	0.1240339	0.1036668
21	0.8114302	0.6597758	0.5375493	0.4388336	0.3589424	0.2941554	0.2415131	0.1986557	0.1636981	0.1351306	0.1117423	0.0925596
22	0.8033962	0.6468390	0.5218925	0.4219554	0.3418499	0.2775051	0.2257132	0.1839405	0.1501817	0.1228460	0.1006687	0.0826425
23	0.7954418	0.6341559	0.5066917	0.4057263	0.3255713	0.2617973	0.2109469	0.1703153	0.1377814	0.1116782	0.0906925	0.0737880
24	0.7875661	0.6217215	0.4919337	0.3901215	0.3100679	0.2469785	0.1971466	0.1576993	0.1264049	0.1015256	0.0817050	0.0658821
25	0.7797684	0.6095309	0.4776056	0.3751168	0.2953028	0.2329986	0.1842492	0.1460179	0.1159678	0.0922960	0.0736081	0.0588233
26	0.7720480	0.5975793	0.4636947	0.3606892	0.2812407	0.2198100	0.1721955	0.1352018	0.1063925	0.0839055	0.0663136	0.0525208
27	0.7644039	0.5858620	0.4501891	0.3468166	0.2678483	0.2073680	0.1609304	0.1251868	0.0976078	0.0762777	0.0597420	0.0468936
28	0.7568356	0.5743746	0.4370768	0.3334775	0.2550936	0.1956301	0.1504022	0.1159137	0.0895484	0.0693433	0.0538216	0.0418693
29	0.7493421	0.5631123	0.4243464	0.3206514	0.2429463	0.1845567	0.1405628	0.1073275	0.0821545	0.0630394	0.0484879	0.0373833
30	0.7419229	0.5520709	0.4119868	0.3083187	0.2313774	0.1741101	0.1313671	0.0993773	0.0753711	0.0573086	0.0436828	0.0333779
31	0.7345771	0.5412460	0.3999871	0.2964603	0.2203595	0.1642548	0.1227730	0.0920160	0.0691478	0.0520987	0.0393539	0.0298017
32	0.7273041	0.5306333	0.3883370	0.2850579	0.2098662	0.1549574	0.1147411	0.0852000	0.0634384	0.0473624	0.0354540	0.0266087
33	0.7201031	0.5202287	0.3770262	0.2740942	0.1998725	0.1461862	0.1072347	0.0788889	0.0582003	0.0430568	0.0319405	0.0237577
34	0.7129733	0.5100282	0.3660449	0.2635521	0.1903548	0.1379115	0.1002193	0.0730453	0.0533948	0.0391425	0.0287752	0.0212123
35	0.7059142	0.5000276	0.3553834	0.2534155	0.1812903	0.1301052	0.0936629	0.0676345	0.0489861	0.0355841	0.0259236	0.0189395
36	0.6989249	0.4902232	0.3450324	0.2436687	0.1726574	0.1227408	0.0875355	0.0626246	0.0449413	0.0323492	0.0233546	0.0169103
37	0.6920049	0.4806109	0.3349829	0.2342968	0.1644356	0.1157932	0.0818088	0.0579857	0.0412306	0.0294083	0.0210402	0.0150985
38	0.6851534	0.4711872	0.3252262	0.2252854	0.1566054	0.1092389	0.0764569	0.0536905	0.0378262	0.0267349	0.0189551	0.0134808
39	0.6783697	0.4619482	0.3157535	0.2166206	0.1491480	0.1030555	0.0714550	0.0497134	0.0347030	0.0243044	0.0170767	0.0120364
40	0.6716531	0.4528904	0.3065568	0.2082890	0.1420457	0.0972222	0.0667804	0.0460309	0.0318376	0.0220949	0.0153844	0.0107468

Table 4: PRESENT VALUE of Annuity of \$1.00 in arrears.												
Period/Per	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	11%	12%
1	0.990099	0.980392	0.970874	0.961538	0.952381	0.943396	0.934579	0.925926	0.917431	0.909091	0.900901	0.892857
2	1.970395	1.941561	1.913470	1.886095	1.859410	1.833393	1.808018	1.783265	1.759111	1.735537	1.712523	1.690051
3	2.940985	2.883883	2.828611	2.775091	2.723248	2.673012	2.624316	2.577097	2.531295	2.486852	2.443715	2.401831
4	3.901966	3.807729	3.717098	3.629895	3.545951	3.465106	3.387211	3.312127	3.239720	3.169865	3.102446	3.037349
5	4.853431	4.713460	4.579707	4.451822	4.329477	4.212364	4.100197	3.992710	3.889651	3.790787	3.695897	3.604776
6	5.795476	5.601431	5.417191	5.242137	5.075692	4.917324	4.766540	4.622880	4.485919	4.355261	4.230538	4.111407
7	6.728195	6.471991	6.230283	6.002055	5.786373	5.582381	5.389289	5.206370	5.032953	4.868419	4.712196	4.563757
8	7.651678	7.325481	7.019692	6.732745	6.463213	6.209794	5.971299	5.746639	5.534819	5.334926	5.146123	4.967640
9	8.566018	8.162237	7.786109	7.435332	7.107822	6.801692	6.515232	6.246888	5.995247	5.759024	5.537048	5.328250
10	9.471305	8.982585	8.530203	8.110896	7.721735	7.360087	7.023582	6.710081	6.417658	6.144567	5.889232	5.650223
11	10.367628	9.786848	9.252624	8.760477	8.306414	7.886875	7.498674	7.138964	6.805191	6.495061	6.206515	5.937699
12	11.255077	10.575341	9.954004	9.385074	8.863252	8.383844	7.942686	7.536078	7.160725	6.813692	6.492356	6.194374
13	12.133740	11.348374	10.634955	9.985648	9.393573	8.852683	8.357651	7.903776	7.486904	7.103356	6.749870	6.423548
14	13.003703	12.106249	11.296073	10.563123	9.898641	9.294984	8.745468	8.244237	7.786150	7.366687	6.981865	6.628168
15	13.865053	12.849264	11.937935	11.118387	10.379658	9.712249	9.107914	8.559479	8.060688	7.606080	7.190870	6.810864
16	14.717874	13.577709	12.561102	11.652296	10.837770	10.105895	9.446649	8.851369	8.312558	7.823709	7.379162	6.973986
17	15.562251	14.291872	13.166118	12.165669	11.274066	10.477260	9.763223	9.121638	8.543631	8.021553	7.548794	7.119630
18	16.398269	14.992031	13.753513	12.659297	11.689587	10.827603	10.059087	9.371887	8.755625	8.201412	7.701617	7.249670
19	17.226008	15.678462	14.323799	13.133939	12.085321	11.158116	10.335595	9.603599	8.950115	8.364920	7.839294	7.365777
20	18.045553	16.351433	14.877475	13.590326	12.462210	11.469921	10.594014	9.818147	9.128546	8.513564	7.963328	7.469444
21	18.856983	17.011209	15.415024	14.029160	12.821153	11.764077	10.835527	10.016803	9.292244	8.648694	8.075070	7.562003
22	19.660379	17.658048	15.936917	14.451115	13.163003	12.041582	11.061240	10.200744	9.442425	8.771540	8.175739	7.644646
23	20.455821	18.292204	16.443608	14.856842	13.4889574	12.303379	11.272187	10.371059	9.580207	8.883218	8.266432	7.718434
24	21.243387	18.913926	16.935542	15.246963	13.798642	12.550358	11.469334	10.528758	9.706612	8.984744	8.348137	7.784316
25	22.023156	19.523456	17.413148	15.622080	14.093945	12.783356	11.653583	10.674776	9.822580	9.077040	8.421745	7.843139
26	22.795204	20.121036	17.876842	15.982769	14.375185	13.003166	11.825779	10.809978	9.928972	9.160945	8.488058	7.895660
27	23.559608	20.706898	18.327031	16.329586	14.643034	13.210534	11.986709	10.935165	10.026580	9.237223	8.547800	7.942554
28	24.316443	21.281272	18.764108	16.663063	14.898127	13.406164	12.137111	11.051078	10.116128	9.306567	8.601622	7.984423
29	25.065785	21.844385	19.188455	16.983715	15.141074	13.590721	12.277674	11.158406	10.198283	9.369606	8.650110	8.021806
30	25.807708	22.396456	19.600441	17.292033	15.372451	13.764831	12.409041	11.257783	10.273654	9.426914	8.693793	8.055184
31	26.542285	22.937702	20.000428	17.588494	15.592811	13.929086	12.531814	11.349799	10.342802	9.479013	8.733146	8.084986
32	27.269589	23.468335	20.388766	17.873551	15.802677	14.084043	12.646555	11.434999	10.406240	9.526376	8.768600	8.111594
33	27.989693	23.988564	20.765792	18.147646	16.002549	14.230230	12.753790	11.513888	10.464441	9.569432	8.800541	8.135352
34	28.702666	24.498592	21.131837	18.411198	16.192904	14.368141	12.854009	11.586934	10.517835	9.608575	8.829316	8.156564
35	29.408580	24.998619	21.487220	18.664613	16.374194	14.498246	12.947672	11.654568	10.566821	9.644159	8.855240	8.175504
36	30.107505	25.488842	21.832252	18.908282	16.546852	14.620987	13.035208	11.717193	10.611763	9.676508	8.878594	8.192414
37	30.799510	25.969453	22.167235	19.142579	16.711287	14.736780	13.117017	11.775179	10.652993	9.705917	8.899635	8.207513
38	31.484663	26.440641	22.492462	19.367864	16.867893	14.846019	13.193473	11.828869	10.690820	9.732651	8.918590	8.220993
39	32.163033	26.902589	22.808215	19.584485	17.017041	14.949075	13.264928	11.878582	10.725523	9.756956	8.935666	8.233030
40	32.834686	27.355479	23.114772	19.792774	17.159086	15.046297	13.331709	11.924613	10.757360	9.779051	8.951051	8.243777