

BUSI 3001 – Summer 2013
Assignment # 1

Question 1

Enrique Corp. purchased the following equity investments in 20x3:

<i>Investment</i>	<i># of shares</i>	<i>Cost</i>	<i>Brokerage Fees</i>
Correa Inc.	2,200	\$231,000	\$3,200
Humala Corp.	3,000	150,000	1,600
Pinera Co.	4,000	180,000	2,000

During 20x3, total dividends received and the fair value per share at December 31, 20x3 was as follows:

	<i>Dividends</i>	<i>Market Value per Share</i>
Correa Inc.	\$1,800	\$96
Humala Corp.	3,500	68
Pinera Co.	-0-	53

During 20x4 Enrique had the following transactions:

- on March 31, sold all of the Correa shares for \$88 per share. Paid brokerage fees of \$2,600 on the sale.
- on May 2, purchased 3,000 shares of Kirchner Corp. for \$60 per share plus \$3,200 in brokerage fees.

During 20x4, dividends received and the fair value per share at December 31, 20x4 was as follows:

	<i>Dividends</i>	<i>Market Value per Share</i>
Correa Inc.	\$600	n/a
Humala Corp.	4,000	\$78
Pinera Co.	-0-	48
Kirchner Corp.	1,200	69

Required – Prepare all journal entries for the years 20x3 – 20x4 under the following assumptions:

- Enrique classifies all of these shares as FVTPL.
- Enrique classifies all of these shares as FVTOCI.

Question 2

Part 1 - Acquisition

On January 4, 20x1, Parker Inc., a publicly accountable entity, acquired 80% of the outstanding common shares of Sanna Corp. by a share-for-share exchange of its own shares valued at \$1,000,000. The balance sheets of both companies just prior to the share exchange are shown below. Sanna has patents that are not shown on the balance sheet, but that have an estimated fair value of \$300,000 and an estimated remaining useful life of four years. Sanna's building and equipment are being depreciated on the straight-line basis and have a remaining useful life of ten years. The intangibles are being amortized over the following three years. Sanna's bonds payable mature on Jan 1, 20x9. The bonds were issued at par and pay a coupon rate of 6%.

*Balance sheets
December 31, 20x0*

	<i>Parker Inc</i>	<i>Sanna Corp</i>	
	<i>Book Values</i>	<i>Book Values</i>	<i>Fair Values</i>
Cash	\$ 60,000	\$ 54,000	\$ 54,000
Accounts and other receivables	168,000	96,000	96,000
Inventories	132,000	66,000	78,000
Buildings and equipment	1,800,000	960,000	840,000
Accumulated depreciation	-840,000	-480,000	
Intangibles	0	144,000	0
	<u>\$1,320,000</u>	<u>\$840,000</u>	
Accounts and other payables	\$ 240,000	\$120,000	120,000
Bonds payable	0	240,000	264,000
Common shares*	720,000	180,000	
Retained earnings	360,000	300,000	
	<u>\$1,320,000</u>	<u>\$840,000</u>	

* P = 300,000 shares; Sanna = 150,000 shares.

Required:

Prepare a consolidated balance sheet for Parker Inc. immediately after the share exchange.

Part 2 - 1 year after acquisition

The trial balances of P and Sanna at December 31, 20x1, are shown below. During the year, Sanna borrowed \$200,000 from P; \$120,000 was repaid and \$80,000 is still outstanding at year-end. No interest is being charged on the loan. Assume a goodwill impairment loss of \$50,000.

Required:

- a. Prepare a consolidated statement of profit and loss for the year ended December 31, 20x1.
- b. Prepare a consolidated balance sheet as at December 31, 20x1. Calculate the Non Controlling Interest and Consolidated Retained Earnings using two different approaches.

*Trial balances: Dr. (Cr.)
December 31, 20x1*

	<i>Parker Inc</i>	<i>Sanna Corp</i>
Cash	9,750	19,500
Accounts and other receivables	273,000	104,000
Inventories	156,000	71,500
Buildings and equipment	1,690,000	1,170,000
Accumulated depreciation	(741,000)	(578,500)
Land	0	78,000
Investment in Sanna	1,000,000	0
Other investments	91,000	39,000
Intangibles	0	104,000
Accounts and other payables	(262,600)	(249,000)
Bonds payable	(60,000)	(240,000)
Common shares	(1,720,000)	(180,000)
Retained earnings	(286,000)	(260,000)
Sales	(1,950,000)	(1,170,000)
Investment income	(48,750)	
Cost of sales	1,300,000	682,000
Depreciation and amortization expense	91,000	110,500
Other expenses	390,000	260,000
Income tax expense	67,600	39,000

Part 3 - 2 years after acquisition

The \$80,000 that Sanna owed to Parker at the beginning of the year was repaid during 20x2. The trial balances of the two companies are shown below. There was no goodwill impairment loss in 20x2.

Required:

- a. Prepare a consolidated statement of profit and loss for the year ended December 31, 20x2.
- b. Prepare a consolidated balance sheet as at December 31, 20x2. Calculate the Non Controlling Interest and Consolidated Retained Earnings using two different approaches.

*Trial balances: Dr. (Cr.)
December 31, 20x2*

	<i>Parker Inc</i>	<i>Sanna Corp</i>
Cash	32,400	42,000
Accounts and other receivables	192,000	243,000
Inventories	168,000	90,000
Buildings and equipment	2,040,000	1,080,000
Accumulated depreciation	(786,000)	(594,000)
Land	180,000	0
Investment in Sanna	1,000,000	0
Other investments	120,000	60,000
Intangibles	0	48,000
Accounts and other payables	(757,610)	(112,700)
Bonds payable	0	(240,000)
Common shares	(1,720,000)	(180,000)
Retained earnings	(436,150)	(338,500)
Dividends paid	120,000	84,000
Sales	(1,983,000)	(1,440,000)
Investment income	(96,000)	0
Other income	0	(111,000)
Cost of sales	1,344,000	864,000
Depreciation & amortization expense	102,000	108,000
Other expenses	420,600	294,000
Income tax expense	59,760	103,200

SOLUTION

Problem 1

(a) *Classification as FVTPL*

20x3	FVTPL Investments	\$561,000	
	Transaction costs (P&L)	6,800	
	Cash		\$567,800
	Cash	5,300	
	Dividend income		5,300
Dec 31, 20x3	FVTPL Investments	66,200	
	Gain on FVTPL Investments (P&L)		66,200
	Fair value of FVTPL Investment Portfolio -		
	Correa		\$211,200
	Humala		204,000
	Pinera		212,000
			<u>\$627,200</u>
20x4	<i>Sale of Correa -</i>		
	Cash (\$193,600 – 2,600)	191,000	
	Transaction costs (P&L)	2,600	
	Loss on FVTPL Investments (P&L)	17,600	
	FVTPL Investments		211,200
	<i>Purchase of Kirchner -</i>		
	FVTPL Investments	180,000	
	Transaction costs (P&L)	3,200	
	Cash		183,200
	Cash	5,800	
	Dividend income		5,800

Dec 31, 20x4	FVTPL Investments	37,000	
	Gain on FVTPL Investments (P&L)		37,000
	Fair value of FVPTL Investment Portfolio -		
	Humala		\$234,000
	Pinera		192,000
	Kirchner		207,000
			<u>633,000</u>
	Carrying value = \$204,000 + 212,000		
	+ 180,000		596,000
	Fair value adjustment required		<u><u>\$37,000</u></u>

(b) ***Classification as FVTOCI***

20x3	FVTOCI Investments	\$567,800	
	Cash		\$567,800
	Cash	5,300	
	Dividend income		5,300
Dec 31, 20x3	FVTOCI Investments	59,400	
	OCI – FV Adjustment on FVTOCI Investments		59,400
	Fair value of portfolio	\$627,200	
	Carrying value	<u>567,800</u>	
	FV Adjustment	<u>\$ 59,400</u>	
20x4	<i>Sale of Correa -</i>		
	Net cash received on sale = \$191,000		
	OCI - FV Adjustment on FVTOCI Investments	20,200	
	FVTOCI Investments		20,200
	\$211,200 Carrying Value		
	- \$191,000 Cash Proceeds on Sale		
	Cash	191,000	
	FVTOCI Investments		191,000
	Retained earnings	43,200	
	A*OCI		43,200
	(\$231,000 + 3,200) Initial Cost –		
	\$191,000 Cash Proceeds on Sale		

Purchase of Kirchner-

	FVTOCI Investments	183,200	
	Cash		183,200
	Cash	5,800	
	Dividend income		5,800
Dec 31, 20x6	OCI	33,800	
	FVTOCI Investments		33,800
	Fair value of portfolio	\$633,000	
	Carrying value = \$204,000 + 212,000		
	+ 183,200	599,200	
	FV Adjustment	<u>33,800</u>	

		Accumulated Other Comprehensive Income		
			59,400	Beginning Balance
FV Adjustment prior to sale of Correa	20,200	43,200		Reclassification of realized loss on Correa
		33,800		Year-end Adjustment to Market Value
		\$116,200		Ending Balance

Check:

Aggregate original cost (\$151,600 Humala + 182,000 Pinera + 183,200 Kirchner)	\$516,800
Aggregate Market Value	<u>633,000</u>
	<u>\$ 116,200</u>

Part 1 – Acquisition

Purchase price imputed at 100%: \$1,000,000 / 0.80		\$1,250,000
Net assets acquired		<u>480,000</u>
Acquisition differential		770,000
Allocation:		
Inventory	\$12,000	
Buildings and equipment	360,000	
Intangibles	(144,000)	
Patents	300,000	
Bonds payable	(24,000)	<u>504,000</u>
Goodwill		<u>\$266,000</u>

Parker Inc.

Consolidated Balance Sheet

As at January 4, 20x1

Cash (Σ)		\$114,000
Accounts and other receivable (Σ)		264,000
Inventory ($\Sigma + 12,000$ ^{AD})		210,000
Buildings and equipment ($1,800,000$ ^{Parker} + $480,000$ ^{Net Sanna} + $360,000$ ^{AD})		2,640,000
Accumulated depreciation		(840,000)
Intangibles ($144,000$ ^{Sanna} - $144,000$ ^{AD} + $300,000$ ^{AD})		300,000
Goodwill		266,000
Accounts and other payables (Σ)		(360,000)
Bonds payable ($240,000 + 24,000$ ^{AD})		(264,000)
Common stock ($720,000 + 1,000,000$ ^{Stock Issued to Sanna Shareholders})		(1,720,000)
Retained earnings		(360,000)
Noncontrolling Interest ($\$1,250,000 \times 20\%$)		(250,000)

Part 2 – 1 year after acquisition

	<i>Balance</i> <i>Jan 4, 20x1</i>	<i>Amortization</i> <i>20x1</i>	<i>Balance</i> <i>Dec 31, 20x1</i>
Inventory (1)	\$12,000	(\$12,000)	-0-
Buildings and equipment (10)	360,000	(36,000)	\$324,000
Intangibles (3)	(144,000)	48,000	(96,000)
Patents (4)	300,000	(75,000)	225,000
Bonds payable (15)	(24,000)	2,554	(21,446)
Goodwill	266,000	(50,000)	216,000
	<u>\$770,000</u>	<u>(\$122,446)</u>	<u>\$647,554</u>

Amortization of bonds payable:

YTM on date of acquisition:

$$N = 16 \quad PV = 264,000 \quad PMT = -7,200 \quad FV = -240,000$$

$$I/Y = 2.249\%$$

Consolidated Value of bonds @ Dec 31, 20x1:

$$N = 14 \dots PV = 261,446$$

$$\text{Amortization of bond in } 20x1 = \$264,000 - 261,446 = \$2,554$$

Consolidated Value of bonds @ Dec 31, 20x2:

$$N = 12 \dots PV = 258,775$$

$$\text{Amortization of bond in } 20x2 = \$261,446 - 258,775 = \$2,671$$

a. *Parker Inc.*

Consolidated Statement of Income
for the year ended December 31, 20x1

Sales (Σ)	\$3,120,000
Investment income (Σ - 32,000 Dividends from Sanna)	16,750
Cost of sales (Σ + 12,000 ^{Amort AD - Inventory})	(1,994,000)
Depreciation and amortization (Σ + 36,000 ^{Amort AD - Building & Equip} - 48,000 ^{Amort AD Intangibles} + 75,000 ^{Amort AD Patents})	(264,500)
Goodwill impairment loss	(50,000)
Other expenses (Σ - 2,554 ^{Amort AD Bonds})	(647,446)
Income tax expense (Σ)	(106,600)
Profit for the year	<u>\$74,204</u>

Attributable to:

Equity holders of Parker Inc (1)	\$82,993
Noncontrolling Interest (-\$43,946 x 20%)	(8,789)
	<u>\$74,204</u>

(1) Profit for the year attributable to the equity holders of Parker Inc.	
Parker Inc's net income	\$150,150
Less dividends received from Sanna Corp	(32,000)
Sanna Corp net income	\$78,500
Amortization of acquisition differential	(122,446)
	<u>(43,946)</u>
	x 80%
	<u>(35,157)</u>
	<u>\$82,993</u>

b. *Parker Inc*
Consolidated Balance Sheet
as at December 31, 20x1

Cash (Σ)	\$29,250
Accounts and other receivables (Σ - 80,000 ^{Receivable from Sanna})	297,000
Inventories (Σ)	227,500
Buildings & equip. (Σ - 480,000 ^{Acc Dep Sanna at Acquisition} + 360,000 ^{AD})	2,740,000
Accumulated dep. (Σ - 480,000 ^{Acc Dep Sanna at Acquisition} + 36,000 ^{AD})	(875,500)
Land (Σ)	78,000
Other investments (Σ)	130,000
Intangibles (Σ - 96,000 ^{AD - Intangibles} + 225,000 ^{AD - Patents})	233,000
Goodwill	216,000
Accounts and other payables (Σ - 80,000 ^{Payable to Parker})	(431,600)
Bonds payable (Σ + 21,446 ^{AD})	(321,446)
Common shares	(1,720,000)
Retained earnings ($\$360,000$ ^{Beg} + 82,993 ^{Profit} - 74,000 ^{Dividends})	(368,993)
Noncontrolling interest ($\$250,000$ ^{Beg} - 8,789 ^{Loss} - 8,000 ^{Dividends})	(233,211)

Alternative Calculations for Consolidated R/E and NCI -

Consolidated Retained Earnings

Parker's Retained Earnings (\$360,000^{Beginning} + 150,150^{Net Income}
– 74,000^{Dividends}) \$436,150

Sanna' Retained Earnings (\$300,000^{Beginning}
+ 78,500^{Net Income} – 40,000^{Dividends}) \$338,500
Less Retained Earnings at acquisition (300,000)
Post-Acquisition increase 38,500
Amortization of AD (122,446)
(83,946)
x 80% (67,157)
\$368,993

Noncontrolling interest

Net assets of Sanna. Corp (\$480,000^{Beg} + 78,500^{Sanna Profit}
– 40,000^{Dividends}) \$518,500
Unamortized acquisition differential 647,554
1,166,054
x 20%
\$233,211

Part 3 – 2 years after acquisition

	<i>Balance</i> <i>Dec 31, 20x1</i>	<i>Amortization</i> <i>20x1</i>	<i>Balance</i> <i>Dec 31, 20x1</i>
Inventory (1)	-0-	-	-0-
Buildings and equipment (10)	\$324,000	(36,000)	\$288,000
Intangibles (3)	(96,000)	48,000	(48,000)
Patents (4)	225,000	(75,000)	150,000
Bonds payable (15)	(21,446)	2,671	(18,775)
Goodwill	216,000	-	216,000
	<u>\$647,554</u>	<u>(\$60,329)</u>	<u>\$587,225</u>

- a. *Parker Inc.*
Consolidated Statement of Income
for the year ended December 31, 20x2

Sales (Σ)	\$3,423,000
Investment income (Σ - 67,200 Dividends from Sanna)	28,800
Other Income (Σ)	111,000
Cost of sales (Σ)	(2,208,000)
Depreciation and amortization (Σ + 36,000 ^{Amort AD – Building & Equip} – 48,000 ^{Amort AD Intangibles} + 75,000 ^{Amort AD Patents})	(273,000)
Other expenses (Σ - 2,671 ^{Amort AD Bonds})	(711,929)
Income tax expense (Σ)	(162,960)
Profit for the year	<u>\$206,911</u>

Attributable to:

Equity holders of Parker Inc (1)	\$182,617
Noncontrolling Interest (\$121,471 x 20%)	24,294
	<u>\$206,911</u>

(1) Profit for the year attributable to the equity holders of Parker Inc.

Parker Inc's net income	\$152,640
Less dividends received from Sanna Corp	(67,200)

Sanna Corp net income	\$181,800
Amortization of acquisition differential	(60,329)
	<u>121,471</u>
	x 80%
	<u>97,177</u>
	<u>\$182,617</u>

b. *Parker Inc*
Consolidated Balance Sheet
as at December 31, 20x2

Cash (Σ)	\$74,400
Accounts and other receivables (Σ)	435,000
Inventories (Σ)	258,000
Buildings & equip. (Σ - 480,000 ^{Acc Dep Sanna at Acquisiton} + 360,000 ^{AD})	3,000,000
Accumulated dep. (Σ - 480,000 ^{Acc Dep Sanna at Acquisiton} + 72,000 ^{AD})	(972,000)
Land (Σ)	180,000
Other investments (Σ)	180,000
Intangibles (Σ - 48,000 ^{AD - Intangibles} + 150,000 ^{AD - Patents})	150,000
Goodwill	216,000
Accounts and other payables (Σ)	(870,310)
Bonds payable (Σ + 18,775 ^{AD})	(258,775)
Common shares	(1,720,000)
Retained earnings (\$368,993 ^{Beg} + 182,617 ^{Profit} - 120,000 ^{Dividends})	(431,610)
Noncontrolling interest (\$233,211 ^{Beg} + 24,294 ^{Profit} - 16,800 ^{Div.})	(240,705)

Alternative Calculations for Consolidated R/E and NCI -

Parker Inc Retained Earnings, end of year (\$436,150 ^{Beg Balance} + 152,640 ^{Profit} - 120,000 ^{Dividends})	\$468,790
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Sanna Corp Retained Earnings, end of year (\$338,500 ^{Beg} + 181,800 ^{Sanna Profit} - 84,000 ^{Dividends})	\$436,300
Less retained earnings at acquisition	<u>300,000</u>
Post acquisition increase	136,300
Amortization of AD (\$122,446 + 60,329)	<u>(182,775)</u>
	(46,475)
	x 80%
	<u>(37,180)</u>
	<u>\$431,610</u>

Noncontrolling interest	
Net assets of Sanna. Corp - \$180,000 ^{Common Shares} + 436,300 ^{R/E}	\$616,300
Unamortized acquisition differential	<u>587,225</u>
	1,203,525
	x 20%
	<u>\$240,705</u>

Marking Key

Question 1 –

FVTPL -

- Gain on FVTPL Investments @ Dec 31, 20x3 = \$66,200 1
- Fair Value adjustment at Dec 31, 20x4 = \$37,000 gain 1

FVTOCI -

- Sale of Correa -
 - FV Adjustment = \$20,200 loss 1
 - Transfer to R/E = \$43,200 realized loss 1
- Fair Value adjustment at Dec 31, 20x4 = \$33,800 gain 1

Question 2 –

Part 1 - Acquisition

- Goodwill = \$266,000 1
- Noncontrolling interest = \$250,000 1

Part 2 – 1 year after acquisition

- Income statement proper format 1
- Depreciation and amortization = \$1,994,000 1
- Other expenses = \$647,446 1
- Profit breakdown adds up to the profit for the year 1
- *Bonus mark:* profit attributable to equity holders = \$82,993 1

- Buildings and equipment = \$2,740,000 1
- Bonds payable = \$321,446 1
- NCI and RE calculated 2 ways and numbers agree 1
- *Bonus mark:* consolidated R/E = \$368,993 1

Part 3 – 2 years after acquisition

- Income statement proper format 1
- Profit breakdown adds up to the profit for the year 1
- *Bonus mark:* profit attributable to equity holders = \$182,617 1

- Accumulated Depreciation = \$972,000 1
- Intangibles = \$150,000 1
- NCI and RE calculated 2 ways and numbers agree 1
- *Bonus mark:* NCI = \$240,705 1

Overall format (word processed, professionally looking, easy to follow) 3

