Financial Reporting
Theory and Practice

Advanced Accounting Part 2

TEACHER'S MANUAL

2015

BASED ON
PHILIPPINE FINANCIAL REPORTING STANDARDS (PFRSs)

Dear fellow teacher,

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If you have comments, queries or suggestions, please do not hesitate to contact me (mobile no. 09178706962; email ad: zeus.millan@yahoo.com).

Thanks and God bless.

Sincerely,

Zeus Vernon B. Millan

“The secret of teaching is to appear to have known all your life what you learned this afternoon.”

- *ANONYMOUS*

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Multiple Choice – Theory

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Multiple Choice – Computational

Answers at a glance:

1.	C	6.	A	11.	B	16.	B
2.	B	7.	D	12.	D	17.	B
3.	D	8.	D	13.	B	18.	D
4.	A	9.	D	14.	C		
5.	B	10.	C	15.	A		

Solutions:

1. C

Solution:

Consideration transferred	6,000,000
Non-controlling interest in the acquiree	-
Previously held equity interest in the acquiree	-
Total	*6,000,000*
Fair value of net identifiable assets acquired	(4,720,000)
Goodwill	***1,280,000***

2. B

Solution:

Consideration transferred	4,000,000
Non-controlling interest in the acquiree	-
Previously held equity interest in the acquiree	-
Total	*4,000,000*
Fair value of net identifiable assets acquired	(4,720,000)
Gain on a bargain purchase	***(720,000)***

3. D

Solution:

Consideration transferred	4,000,000

Non-controlling interest in the acquiree	620,000
Previously held equity interest in the acquiree	-
Total	*4,620,000*
Fair value of net identifiable assets acquired	(3,200,000)
Goodwill	***1,420,000***

4. A

Solution:

Consideration transferred	2,400,000
Non-controlling interest in the acquiree	620,000
Previously held equity interest in the acquiree	-
Total	*3,020,000*
Fair value of net identifiable assets acquired (4.8M – 1.6M)	(3,200,000)
Gain on a bargain purchase	***(180,000)***

5. B

Solution:

Consideration transferred	4,000,000
Non-controlling interest in the acquiree	1,000,000
Previously held equity interest in the acquiree	-
Total	*5,000,000*
Fair value of net identifiable assets acquired	(3,200,000)
Goodwill	***1,800,000***

6. A

Solution:

Fair value of identifiable assets acquired	4,800,000
Fair value of liabilities assumed	(1,600,000)
Fair value of net identifiable assets acquired	*3,200,000*
Multiply by: Non-controlling interest	20%
NCI's proportionate share in net identifiable assets	*640,000*

Consideration transferred	4,000,000
Non-controlling interest in the acquiree	640,000
Previously held equity interest in the acquiree	-
Total	*4,640,000*
Fair value of net identifiable assets acquired	(3,200,000)

Goodwill	***1,440,000***

7. D

Solution:

Consideration transferred (8,000 sh. x ₱500)	4,000,000
Non-controlling interest in the acquiree	-
Previously held equity interest in the acquiree	-
Total	*4,000,000*
Fair value of net identifiable assets acquired (6.4M - 3.6M)	(2,800,000)
Goodwill	***1,200,000***

8. D

Solution:

Consideration transferred *(fair value of bonds)*	4,000,000
Non-controlling interest in the acquiree	-
Previously held equity interest in the acquiree	-
Total	*4,000,000*
Fair value of net identifiable assets acquired (6.4M - 3.6M)	(2,800,000)
Goodwill	***1,200,000***

9. D

Solution:

Consideration transferred	4,000,000
Non-controlling interest in the acquiree	-
Previously held equity interest in the acquiree	-
Total	*4,000,000*
Fair value of net identifiable assets acquired (6.4M - 3.6M)	(2,800,000)
Goodwill	***1,200,000***

The ₱800,000 *restructuring provisions* are ignored because these are post-acquisition expenses.

10. C

Solution:

Fair value of identifiable assets acquired, ***including intangible asset on the operating lease with favorable terms*** (₱6.4M ***+ ₱80K***)	6,480,000
Fair value of liabilities assumed	(3,600,000)
Fair value of net identifiable assets acquired	*2,880,000*

Goodwill (gain on bargain purchase) is computed as follows:

Consideration transferred	4,000,000
Non-controlling interest in the acquiree	-
Previously held equity interest in the acquiree	-
Total	*4,000,000*
Fair value of net identifiable assets acquired	(2,880,000)
Goodwill	***1,120,000***

11. B

Solution:

A ***liability*** shall be recognized because the terms of the operating lease where the acquiree is the lessee is ***unfavorable***.

The fair value of net identifiable assets acquired is computed as follows:

Fair value of identifiable assets acquired	6,400,000
Fair value of liabilities assumed, ***including liability on the operating lease with unfavorable terms*** (₱3.6M + ₱80K)	(3,680,000)
Fair value of net identifiable assets acquired	*2,720,000*

Goodwill (gain on bargain purchase) is computed as follows:

Consideration transferred	4,000,000
Non-controlling interest in the acquiree	-
Previously held equity interest in the acquiree	-
Total	*4,000,000*
Fair value of net identifiable assets acquired	(2,720,000)
Goodwill	***1,280,000***

12. D

Solution:

No intangible asset or liability is recognized, regardless of terms of the operating lease, because the ***acquiree is the lessor***.

Goodwill (gain on bargain purchase) is computed as follows:

Consideration transferred	4,000,000
Non-controlling interest in the acquiree	-
Previously held equity interest in the acquiree	-
Total	*4,000,000*
Fair value of net identifiable assets acquired (6.4M - 3.6M)	(2,800,000)
Goodwill	***1,200,000***

13. B

Solution:

The fair value of net identifiable assets acquired is computed as follows:

Fair value of identifiable assets before recognition of unrecorded assets, excluding recorded goodwill (6.2M – 80K)	6,120,000
Fair value of unrecorded identifiable intangible assets ***(all of the items listed)***	1,080,000
Total fair value of identifiable assets acquired	7,200,000
Fair value of liabilities assumed	(1,800,000)
Fair value of net identifiable assets acquired	*5,400,000*

Goodwill (gain on bargain purchase) is computed as follows:

Consideration transferred	6,000,000
Non-controlling interest in the acquiree	-
Previously held equity interest in the acquiree	-
Total	*6,000,000*
Fair value of net identifiable assets acquired	(5,400,000)
Goodwill	***600,000***

14. C

Solution:

Fair value of identifiable assets	6,400,000
Costs to sell of the “held for sale” asset	(80,000)
Fair value of unrecognized research and development	200,000
Adjusted value of identifiable assets	*6,520,000*
Fair value of liabilities assumed	(3,600,000)
Fair value of net identifiable assets acquired	*2,920,000*

Consideration transferred	4,000,000
Non-controlling interest in the acquiree	-
Previously held equity interest in the acquiree	-
Total	*4,000,000*
Fair value of net identifiable assets acquired	(2,920,000)
Goodwill	***1,080,000***

15. A

Solution:

The adjusted fair value of net identifiable assets acquired is computed as follows:

Fair value of identifiable assets acquired		6,400,000
Total fair value of liabilities assumed:		
Fair value of liabilities assumed	3,600,000	
Fair value of contingent liabilities assumed:		
Contractual contingent liability assumed	40,000	
Contractual contingent liability assumed	120,000	
Non-contractual contingent liability assumed	200,000	(3,960,000)
Fair value of net identifiable assets acquired		*2,440,000*
Consideration transferred		4,000,000
Non-controlling interest in the acquiree		320,000
Previously held equity interest in the acquiree		-
Total		*4,320,000*
Fair value of net identifiable assets acquired		(2,440,000)
Goodwill		***1,880,000***

Consideration transferred and indemnification asset

16. B

Solution:

The fair value of the consideration transferred is determined as follows:

Cash payment (₱4M x 50%)	2,000,000
Present value of future cash payment (Note payable) (₱4M x 50% x PV of ₱1 @10%, n=5)	1,241,843
Land transferred to former owners of XYZ – at fair value	1,200,000
Fair value of consideration transferred	*4,441,843*

The fair value of the net identifiable assets acquired is computed as follows:

Fair value of assets	6,400,000
Indemnification asset (480,000 – 400,000)	80,000
Total	6,480,000
Fair value of liabilities	(3,600,000)
Fair value of net identifiable assets acquired	*2,880,000*

Goodwill (gain on bargain purchase) is computed as follows:

Consideration transferred	4,441,843
Non-controlling interest in the acquiree	-

Previously held equity interest in the acquiree	-
Total	*4,441,844*
Fair value of net identifiable assets acquired	(2,880,000)
Goodwill / (Gain on a bargain purchase)	***1,561,843***

17. B

Solution:

The deferred tax liability and asset are computed as follows:

	Carrying amounts	***Fair values***	***Taxable/ (Deductible) Temporary difference***
Cash in bank	40,000	40,000	-
Receivables – net	680,000	480,000	200,000
Inventory	2,080,000	1,400,000	680,000
Building – net	4,000,000	4,400,000	(400,000)
Patent	-	120,000	(120,000)
Payables	1,600,000	1,600,000	-
Contingent liability	-	80,000	80,000

Total ***taxable*** *temporary difference* (400K + 120K)	520,000
Multiply by: Tax rate	30%
Deferred tax liability	*156,000*

Total ***deductible*** *temporary difference* (200K + 680K + 80K)	960,000
Multiply by: Tax rate	30%
Deferred tax asset	*288,000*

The fair value of the net identifiable assets of the acquiree is computed as follows:

Fair value of identifiable assets acquired *excluding recorded goodwill* (6.4M – 80K goodwill + 120K unrecorded patent + ***288K deferred tax asset***)	6,728,000
Fair value of liabilities assumed (1.6M + 80K contingent liability ***+ 156K deferred tax liability***)	(1,836,000)
Fair value of net identifiable assets acquired	*4,892,000*

Goodwill is computed as follows:

Consideration transferred	6,000,000

Non-controlling interest in the acquiree	-
Previously held equity interest in the acquiree	-
Total	*6,000,000*
Fair value of net identifiable assets acquired	(4,892,000)
Goodwill	***1,108,000***

18. D

Solution:

The consideration transferred is adjusted for the dividends purchased as follows:

Fair value of consideration transferred	6,400,000
Dividends-on (Dividends purchased)	(400,000)
Adjusted consideration transferred	*6,000,000*

Goodwill is computed as follows:

Consideration transferred	6,000,000
Non-controlling interest in the acquiree	-
Previously held equity interest in the acquiree	-
Total	*6,000,000*
FV of net identifiable assets acquired (6.4M – 80K - 2M)	(4,320,000)
Goodwill	***1,680,000***

Exercises

1. Solutions:

Case #1

(1)	Consideration transferred	3,000,000
(2)	Non-controlling interest in the acquiree	-
(3)	Previously held equity interest in the acquiree	-
	Total	*3,000,000*
	Fair value of net identifiable assets acquired*	(2,360,000)
	Goodwill	***640,000***

* Fair value of identifiable assets acquired *excluding goodwill*

(3.2M – 40K)	3,160,000
Fair value of liabilities assumed	(800,000)
Fair value of net identifiable assets acquired	*2,360,000*

Case #2:

(1)	Consideration transferred	2,000,000

(2)	Non-controlling interest in the acquiree	-
(3)	Previously held equity interest in the acquiree	-
	Total	*2,000,000*
	Fair value of net identifiable assets acquired	(2,360,000)
	Gain on a bargain purchase	***(360,000)***

2. Solutions:

Case #1:

(1)	Consideration transferred	2,000,000
(2)	Non-controlling interest in the acquiree	310,000
(3)	Previously held equity interest in the acquiree	-
	Total	*2,310,000*
	Fair value of net identifiable assets acquired	(1,600,000)
	Goodwill	***710,000***

Case #2:

(1)	Consideration transferred	1,200,000
(2)	Non-controlling interest in the acquiree	310,000
(3)	Previously held equity interest in the acquiree	-
	Total	*1,510,000*
	Fair value of net identifiable assets acquired	(1,600,000)
	Gain on a bargain purchase	***(90,000)***

Case #3:

(1)	Consideration transferred	2,000,000
(2)	Non-controlling interest in the acquiree	500,000
(3)	Previously held equity interest in the acquiree	-
	Total	*2,500,000*

Fair value of net identifiable assets acquired	(1,600,000)
Goodwill	***900,000***

Case #4:

(1) Consideration transferred	2,000,000
(2) Non-controlling interest in the acquiree*	320,000
(3) Previously held equity interest in the acquiree	-
Total	*2,320,000*
Fair value of net identifiable assets acquired	(1,600,000)
Goodwill	***720,000***

*The non-controlling interest's proportionate share of acquiree's identifiable net assets is computed as follows:

Fair value of identifiable assets acquired	2,400,000
Fair value of liabilities assumed	(800,000)
Fair value of net identifiable assets acquired	*1,600,000*
Multiply by: Non-controlling interest	20%
Non-controlling interest's proportionate share in net identifiable assets	***320,000***

3. Solutions:

Case #1:

(1) Consideration transferred (8,000 sh. x P250)	2,000,000
(2) Non-controlling interest in the acquiree	-
(3) Previously held equity interest in the acquiree	-
Total	*2,000,000*
Fair value of net identifiable assets acquired	(1,400,000)
Goodwill	***600,000***

Case #2:

(1) Consideration transferred *(fair value of bonds)*	2,000,000
(2) Non-controlling interest in the acquiree	-
(3 Previously held equity interest in the acquiree	-

)	
Total	*2,000,000*
Fair value of net identifiable assets acquired	(1,400,000)
Goodwill	***600,000***

4. Solution:

(1) Consideration transferred	2,000,000
(2) Non-controlling interest in the acquiree	-
(3) Previously held equity interest in the acquiree	-
Total	*2,000,000*
Fair value of net identifiable assets acquired	(1,400,000)
Goodwill	***600,000***

5. Solutions:

Case #1:

(1) Consideration transferred	2,000,000
(2) Non-controlling interest in the acquiree	-
(3) Previously held equity interest in the acquiree	-
Total	*2,000,000*
Fair value of net identifiable assets acquired*	(1,440,000)
Goodwill	***560,000***

*The fair value of net identifiable assets acquired is computed as follows:

Fair value of identifiable assets acquired , ***including intangible asset on the operating lease with favorable terms*** (P3.2M + P40K)	3,240,000
Fair value of liabilities assumed	(1,800,000)
Fair value of net identifiable assets acquired	*1,440,000*

Case #2:

Goodwill (gain on bargain purchase) is computed as follows:

(1) Consideration transferred	2,000,000

(2)	Non-controlling interest in the acquiree	-
(3)	Previously held equity interest in the acquiree	-
	Total	*2,000,000*
	Fair value of net identifiable assets acquired*	(1,360,000)
	Goodwill	***640,000***

* The fair value of net identifiable assets acquired is computed as follows:

Fair value of identifiable assets acquired	3,200,000
Fair value of liabilities assumed, ***including liability on the operating lease with unfavorable terms*** (P1.8M + P40K)	(1,840,000)
Fair value of net identifiable assets acquired	*1,360,000*

Case #3:
Goodwill (gain on bargain purchase) is computed as follows:

(1)	Consideration transferred	2,000,000
(2)	Non-controlling interest in the acquiree	-
(3)	Previously held equity interest in the acquiree	-
	Total	*2,000,000*
	Fair value of net identifiable assets acquired	(1,400,000)
	Goodwill	***600,000***

6. Solution:
The fair value of net identifiable assets acquired is computed as follows:

Fair value of identifiable assets before recognition of unrecorded assets, ***excluding recorded goodwill*** (3.1M – 40K)	3,060,000
Fair value of unrecorded identifiable intangible assets (all of the items listed above)	540,000
Total fair value of identifiable assets acquired	*3,600,000*
Fair value of liabilities assumed	(900,000)
Fair value of net identifiable assets acquired	*2,700,000*

Goodwill (gain on bargain purchase) is computed as follows:

(1)	Consideration transferred	3,000,000
(2	Non-controlling interest in the acquiree	-

(3) Previously held equity interest in the acquiree	-
Total	*3,000,000*
Fair value of net identifiable assets acquired	(2,700,000)
Goodwill	***300,000***

7. Solution:

The fair value of net identifiable assets is computed as follows:

Fair value of identifiable assets	3,200,000
Costs to sell of the "held for sale" asset	(40,000)
Fair value of unrecognized research and development	100,000
Adjusted value of identifiable assets	*3,260,000*
Fair value of liabilities assumed	(1,800,000)
Fair value of net identifiable assets acquired	1,460,000

Goodwill (gain on bargain purchase) is computed as follows:

(1) Consideration transferred	2,000,000
(2) Non-controlling interest in the acquiree	-
(3) Previously held equity interest in the acquiree	-
Total	*2,000,000*
Fair value of net identifiable assets acquired	(1,460,000)
Goodwill	***540,000***

8. Solution:

Cash payment (P2M x 50%)	1,000,000
Present value of future cash payment (2M x 50% x PV of P1 @10%, n=5)	620,922
Piece of land transferred to former owners – at fair value	600,000
Fair value of consideration transferred	*2,220,922*

The fair value of the net identifiable assets acquired is computed as follows:

Fair value of assets	3,200,000
Indemnification asset (240,000 – 200,000)	40,000

Total	3,240,000
Fair value of liabilities	(1,800,000)
Fair value of net identifiable assets acquired	*1,440,000*

Goodwill (gain on bargain purchase) is computed as follows:

(1)	Consideration transferred	2,220,922
(2)	Non-controlling interest in the acquiree	-
(3)	Previously held equity interest in the acquiree	-
	Total	*2,220,922*
	Fair value of net identifiable assets acquired	(1,440,000)
	Goodwill / (Gain on a bargain purchase)	***780,922***

9. Solutions:

Requirement (a): Fair value of consideration transferred

	COLLOQUY Co.	***Combined entity***	***Increase***
Share capital	1,200,000	1,400,000	200,000
Share premium	600,000	2,400,000	1,800,000
Totals	*1,800,000*	*3,800,000*	*2,000,000*

The fair value of the shares transferred as consideration for the business combination is ***P2,000,000*** (i.e., total increase in COLLOQUY's share capital and share premium accounts).

The number of shares issued in the business combination is computed as follows:

Increase in COLLOQUY's share capital account (see table above)	200,000
Divide by: COLLUQUY's par value per share	10
Number of shares issued	***20,000***

The acquisition-date fair value per share of the shares issued is computed as follows:

Fair value of consideration transferred	2,000,000
Divide by: Number of shares issued	20,000
Acquisition-date fair value per share	***200***

Requirement (b): Goodwill

Goodwill (gain on bargain purchase) is computed as follows:

(1)	Consideration transferred	2,000,000
(2)	Non-controlling interest in the acquiree	-
(3)	Previously held equity interest in the acquiree	-
	Total	*2,000,000*
	Fair value of net identifiable assets acquired	(1,400,000)
	Goodwill	***600,000***

Requirement (c): Retained earnings of the combined entity

Because CONVERSATION's retained earnings will be eliminated after the business combination, the retained earnings of the combined entity immediately after the business combination is ***equal to COLLOQUY's acquisition date retained earnings*** (i.e., ***P1,600,000***)

10. Solution:

The consideration transferred is adjusted for the dividends purchased as follows:

Fair value of consideration transferred	3,200,000
Dividends-on (Dividends purchases)	(200,000)
Adjusted consideration transferred	*3,000,000*

Goodwill is computed as follows:

(1)	Consideration transferred	3,000,000
(2)	Non-controlling interest in the acquiree	-
(3)	Previously held equity interest in the acquiree	-
	Total	*3,000,000*
	FV of net identifiable assets acquired	(2,160,000)
	Goodwill	***840,000***

11. Solution:

The ***deferred tax liability (asset)*** is determined as follows:

	Carrying amounts	***Fair values***	***Temporary taxable/ (deductible) difference***
Cash in bank	20,000	20,000	-

Receivables – net	340,000	240,000	(100,000)
Inventory	1,040,000	700,000	(340,000)
Building – net	2,000,000	2,200,000	200,000
Patent	-	60,000	60,000
Payables	800,000	800,000	-
Contingent liability	-	40,000	(40,000)

Total ***taxable*** *temporary difference* (200K + 60K)	260,000
Multiply by: Tax rate	30%
Deferred tax liability	***78,000***

Total ***deductible*** *temporary difference* (100K + 340K + 40K)	480,000
Multiply by: Tax rate	30%
Deferred tax asset	***144,000***

Goodwill is computed as follows:

(1)	Consideration transferred	3,000,000
(2)	Non-controlling interest in the acquiree	-
(3)	Previously held equity interest in the acquiree	-
	Total	*3,000,000*
	Fair value of net identifiable assets acquired*	(2,446,000)
	Goodwill	***554,000***

*The fair value of the net identifiable assets of the acquiree is computed as follows:

Fair value of identifiable assets acquired *excluding goodwill* (3.2M – 40K recorded goodwill + 60K unrecorded patent + 144K deferred tax asset)	3,364,000
Fair value of liabilities assumed (800K + 40K contingent liability + 78K deferred tax liability)	(918,000)
Fair value of net identifiable assets acquired	*2,446,000*

Chapter 14 – Business Combinations (Part 2)

Multiple Choice – Theory

1. C
2. C
3. D
4. A
5. A
6. B
7. D
8. A
9. A

Multiple Choice – Computational

Answers at a glance:

1.	A	6.	D	11.	A	16.	C	21.	B	26.	D
2.	D	7.	B	12.	B	17.	D	22.	C	27.	C
3.	A	8.	A	13.	D	18.	C	23.	A	28.	B
4.	B	9.	C	14.	A	19.	D	24.	B		
5.	D	10.	C	15.	B	20.	A	25.	C		

Solution:

1. A

Solution:

	COLLOQUY Co.	***Combined entity***	***Increase***
Share capital	2,400,000	2,800,000	400,000
Share premium	1,200,000	4,800,000	3,600,000
Totals	*3,600,000*	*7,600,000*	***4,000,000***

The fair value of the shares transferred as consideration for the business combination is ***₱4,000,000*** (i.e., total increase in share capital and share premium accounts).

2. D

Solution:

Increase in COLLOQUY's share capital account *(see table above)*	400,000
Divide by: ABC's par value per share	40
Number of shares issued	***10,000***

3. A

Solution:

Fair value of consideration transferred	4,000,000
Divide by: Number of shares issued	10,000
Acquisition-date fair value per share	***400***

4. B

Solution:

Consideration transferred	4,000,000
Non-controlling interest in the acquiree	-
Previously held equity interest in the acquiree	-
Total	*4,000,000*
Fair value of net identifiable assets acquired (6.4M - 3.6M)	(2,800,000)
Goodwill	***1,200,000***

5. D ***3,200,000*** – COLLOQUY's retained earnings

6. D

Solution:

	COLLOQUY Co.	***Combined entity***	***Increase***
Share capital	2,400,000	2,800,000	400,000
Share premium	1,200,000	4,800,000	3,600,000
Totals	*3,600,000*	*7,600,000*	*4,000,000*

Fair value of shares transferred	4,000,000
Divide by: ABC's fair value per share	400
Number of shares issued	***10,000***

7. B

Solution:

Increase in share capital account (see table above)	400,000
Divide by: Number of shares issued	10,000
Par value per share	***40***

8. A

Solution:

Consideration transferred *(see previous computation)*	4,000,000
Non-controlling interest in the acquiree	-
Previously held equity interest in the acquiree	-

Total	*4,000,000*
Fair value of net identifiable assets acquired (squeeze)	***(3,700,000)***
Goodwill *(given information)*	300,000

9. C

Solution:

Consideration transferred	3,200,000
Non-controlling interest in the acquiree (1M x 25%)	1,000,000
Previously held equity interest in the acquiree	720,000
Total	*4,920,000*
Fair value of net identifiable assets acquired	(4,400,000)
Goodwill	***920,000***

10. C

Solution:

Consideration transferred	3,200,000
Non-controlling interest in the acquiree (1M x 25%)	1,000,000
Previously held equity interest in the acquiree	720,000
Total	*4,920,000*
Fair value of net identifiable assets acquired	(4,400,000)
Goodwill	***920,000***

11. A

Solution:

Consideration transferred	3,200,000
Non-controlling interest in the acquiree (1M x 10%)	400,000
Previously held equity interest in the acquiree	720,000
Total	*4,320,000*
Fair value of net identifiable assets acquired	(4,000,000)
Goodwill	***320,000***

12. B

Solution:

Consideration transferred	-
Non-controlling interest in the acquiree (4M x ***100%***)	4,000,000
Previously held equity interest in the acquiree	-
Total	*4,000,000*
Fair value of net identifiable assets acquired	(4,000,000)
Goodwill	***-***

13. D

Solution:

Consideration transferred (4M x 60%*)	2,400,000
Non-controlling interest in the acquiree (4M x 40%*)	1,600,000
Previously held equity interest in the acquiree	-
Total	*4,000,000*
Fair value of net identifiable assets acquired	(4,000,000)
Goodwill	**-**

*After the business combination, the parent's ownership interest is increased to 60% (i.e., 36,000 ÷ 60,000). Consequently, the non-controlling interest is 40%.

14. A

15. B

16. C

17. D

18. C

Solution:

The consideration transferred on the business combination is computed as follows:

Cash payment on business combination	4,000,000
Additional payment to subsidiary's former owner	200,000
Consideration transferred on the business combination	*4,200,000*

The fair value of net identifiable assets acquired is computed as follows:

Fair value of identifiable assets	6,400,000
Fair value of inventory not transferred to DIAPHANOUS	(360,000)
Adjusted fair value of identifiable assets acquired	*6,040,000*
Fair value of liabilities assumed	(3,600,000)
Adjusted fair value of net identifiable assets acquired =	*2,440,000*

Goodwill (gain on bargain purchase) is computed as follows:

Consideration transferred	4,200,000
Non-controlling interest in the acquiree	-
Previously held equity interest in the acquiree	-

Total	*4,200,000*
Fair value of net identifiable assets acquired	(2,440,000)
Goodwill	***1,760,000***

19. D

Solution:

The *settlement loss* to is computed as follows:

Settlement loss *before* adjustment ("off-market" value)	320,000
Carrying amount of deferred liability	(240,000)
Adjusted settlement loss	*80,000*

The consideration transferred on the business combination is computed as follows:

Cash payment	4,000,000
Payment for the settlement of pre-existing relationship ('off-market' value)	(320,000)
Consideration transferred on the business combination	*3,680,000*

The fair value of net identifiable assets acquired is computed as follows:

Fair value of subsidiary's identifiable assets	6,400,000
Intangible asset – reacquired right	160,000
Carrying amount of asset related to the reacquired rights – prepayment	(200,000)
Adjusted fair value of identifiable assets acquired	*6,360,000*
Fair value of liabilities assumed	(3,600,000)
Fair value of net identifiable assets acquired	***2,760,000***

Goodwill (gain on bargain purchase) is computed as follows:

Consideration transferred	3,680,000
Non-controlling interest in the acquiree	-
Previously held equity interest in the acquiree	-
Total	*3,680,000*
Fair value of net identifiable assets acquired	(2,760,000)
Goodwill	***920,000***

20. A

Solution:

The consideration transferred on the business combination is computed as follows:

Cash payment	4,000,000
Payment for the settlement of pre-existing relationship ('off-market' value)	(360,000)
Consideration transferred on the business combination	*3,640,000*

Goodwill (gain on bargain purchase) is computed as follows:

Consideration transferred	3,640,000
Non-controlling interest in the acquiree	-
Previously held equity interest in the acquiree	-
Total	*3,640,000*
Fair value of net identifiable assets acquired	(2,800,000)
Goodwill	***840,000***

21. B

Solution:

The settlement gain or loss is computed as follows:

Payment for the settlement of pre-existing relationship (fair value)	400,000
Carrying amount of estimated liability on pending lawsuit	(520,000)
Settlement gain	*120,000*

The consideration transferred on the business combination is computed as follows:

Cash payment	4,000,000
Payment for the settlement of pre-existing relationship (fair value)	(400,000)
Consideration transferred on the business combination	*3,600,000*

Goodwill (gain on bargain purchase) is computed as follows:

Consideration transferred	3,600,000
Non-controlling interest in the acquiree	-
Previously held equity interest in the acquiree	-
Total	*3,600,000*
Fair value of net identifiable assets acquired (1.6M - .9M)	(2,800,000)
Goodwill	***800,000***

22. C

Solution:

The consideration transferred on the business combination is computed as follows:

Cash payment	4,000,000
Fair value of contingent consideration	40,000
Consideration transferred on the business combination	*4,040,000*

Goodwill (gain on bargain purchase) is computed as follows:

Consideration transferred	4,040,000
Non-controlling interest in the acquiree	-
Previously held equity interest in the acquiree	-
Total	*4,040,000*
Fair value of net identifiable assets acquired (1.6M - .9M)	(2,800,000)
Goodwill	***1,240,000***

23. A

Solution:

*The unrealized loss on change in fair value is computed as follows:

Fair value of liability on January 1, 20x1	40,000
Fair value of liability on December 31, 20x1 [(2.2M – 1.6M) x 10%]	60,000
Increase in fair value of liability (loss)	*(20,000)*

Dec. 31, 20x1	***Unrealized loss on change in fair value – P/L***	***20,000***	
	Liability for contingent consideration		20,000
	to recognize loss on change in fair value of liability assumed for contingent consideration		

24. B

Solution:

Dec. 31, 20x1	Liability for contingent consideration	40,000	
	Gain on extinguishment of liability – P/L		***40,000***

25. C

Solution:

The consideration transferred on the business combination is computed as follows:

Fair value of shares issued (10,000 sh. x ₱400 per sh.)	4,000,000
Fair value of contingent consideration	360,000
Consideration transferred on the business combination	*4,360,000*

Goodwill (gain on bargain purchase) is computed as follows:

Consideration transferred	4,360,000
Non-controlling interest in the acquiree	-
Previously held equity interest in the acquiree	-
Total	*4,360,000*
Fair value of net identifiable assets acquired (6.4M – 3.6M)	(2,800,000)
Goodwill	***1,560,000***

26. D

27. C

Solution:

Dec. 31, 20x1	Share premium – contingent consideration	360,000	
	Share premium		360,000

28. B

Solution:

The adjusted fair value of net identifiable assets acquired is computed as follows:

Fair value of identifiable assets acquired		6,400,000
Fair value of liabilities assumed	3,600,000	-
Fair value of contingent liability assumed	400,000	(4,000,000)
Fair value of net identifiable assets acquired		*600,000*

Goodwill (gain on bargain purchase) is computed as follows:

Consideration transferred	4,000,000
Non-controlling interest in the acquiree	320,000
Previously held equity interest in the acquiree	-
Total	*4,320,000*
Fair value of net identifiable assets acquired	(2,400,000)
Goodwill	***1,920,000***

Exercises

1. Solutions:

Requirement (a): Number of shares issued

	CONJUNCTION Co.	***Combined entity***	***Increase***
Share capital	1,200,000	1,400,000	200,000
Share premium	600,000	2,400,000	1,800,000
Totals	*1,800,000*	*3,800,000*	*2,000,000*

The fair value of the shares transferred as consideration for the business combination is ***P2,000,000***.

The number of shares issued in the business combination is computed as follows:

Fair value of shares transferred	2,000,000
Divide by: CONJUNCTION's fair value per share	200
Number of shares issued	***10,000***

Requirement (b): Par value per share

The par value per share of the shares issued is computed as follows:

Increase in share capital account (see table above)	200,000
Divide by: Number of shares issued	10,000
Par value per share	***20***

Requirement (c): Acquisition-date fair value of the net identifiable assets acquired

(1)	Consideration transferred *(see previous computation)*	2,000,000
(2)	Non-controlling interest in the acquiree	-
(3)	Previously held equity interest in the acquiree	-
	Total	*2,000,000*
	Fair value of net identifiable assets acquired (squeeze)	***(1,400,000)***
	Goodwill *(given information)*	600,000

2. Solutions:

Scenario #1: Goodwill (gain on bargain purchase) is computed as follows:

(1	Consideration transferred	1,600,000

(2)	Non-controlling interest in the acquiree (2M x 25%)	500,000
(3)	***Previously held equity interest in the acquiree***	360,000
	Total	*2,460,000*
	Fair value of net identifiable assets acquired	(2,200,000)
	Goodwill	***460,000***

*100% *minus* 75%

Scenario #2: **The previously held interest was initially classified as FVOCI**

Goodwill (gain on bargain purchase) is computed as follows:

(1)	Consideration transferred	1,600,000
(2)	Non-controlling interest in the acquiree (2M x ***25%***)	500,000
(3)	***Previously held equity interest in the acquiree***	360,000
	Total	*2,460,000*
	Fair value of net identifiable assets acquired	(2,200,000)
	Goodwill	***460,000***

3. Solution:

(1)	Consideration transferred	1,600,000
(2)	Non-controlling interest in the acquiree (2M x ***10%****)	200,000
(3)	***Previously held equity interest in the acquiree***	360,000
	Total	*2,160,000*
	Fair value of net identifiable assets acquired	(2,000,000)
	Goodwill	***160,000***

*100% *minus* 90%

4. Solution:

(1)	Consideration transferred	-
(2)	Non-controlling interest in the acquiree (2M x ***100%***)	2,000,000
(3	Previously held equity interest in the acquiree	-

)		
	Total	*2,000,000*
	Fair value of net identifiable assets acquired	(2,000,000)
	Goodwill	**-**

5. Solution:

(1)	Consideration transferred (2M x ***60%***)	1,200,000
(2)	Non-controlling interest in the acquiree (2M x ***40%***)	800,000
(3)	Previously held equity interest in the acquiree	**-**
	Total	*2,000,000*
	Fair value of net identifiable assets acquired	(2,000,000)
	Goodwill	**-**

6. Solutions:

Case #1:

The unadjusted goodwill is computed as follows:

(1)	Consideration transferred	2,000,000
(2)	Non-controlling interest in the acquiree	-
(3)	Previously held equity interest in the acquiree	-
	Total	*2,000,000*
	Fair value of net identifiable assets acquired	(1,400,000)
	Goodwill (recognized on Sept. 30, 20x1)	***600,000***

The adjusted fair value of net identifiable assets acquired is computed as follows:

Fair value of identifiable assets acquired	3,200,000
Provisional amount assigned to building	(1,400,000)
Fair value of building per appraisal	1,000,000
Adjusted fair value of identifiable assets acquired	*2,800,000*
Fair value of liabilities assumed	(1,800,000)
Adjusted fair value of net identifiable assets acquired = ***1,000,000***	

The adjusted goodwill is computed as follows:

(1)	Consideration transferred	2,000,000
(2)	Non-controlling interest in the acquiree	-

(3)	Previously held equity interest in the acquiree	-
	Total	*2,000,000*
	Fair value of net identifiable assets acquired	***(1,000,000)***
	Goodwill	***1,000,000***

The adjustment to goodwill is computed as follows:

Goodwill recognized on September 30, 20x1	600,000
Adjusted goodwill	1,000,000
Increase in goodwill	***400,000***

The adjustment to depreciation expense recognized in 20x1 is computed as follows:

Depreciation recognized (P1,400,000 ÷ 10 years x 3/12)	35,000
Adjusted depreciation (P1,000,000 ÷ 5 years x 3/12)	50,000
Additional depreciation expense for 20x1	***15,000***

The measurement period adjusting entries are as follows:

July 1, 20x2	Goodwill	400,000	
	Building		400,000
	to record adjustment to provisional amount assigned to building		
July 1, 20x2	Retained earnings	15,000	
	Accumulated depreciation		15,000

Of course if monthly depreciation expenses were recognized during January to June 30, 20x2, the monthly depreciation expenses recognized shall also be adjusted accordingly.

Case #2:

INNOCUOUS shall recognize the fair value of the patent as a ***retrospective adjustment*** to the goodwill recognized on September 30, 20x1. Further, the amortization expense that would have been recognized had the patent been recorded on September 30, 20x1 shall also be recognized as retrospective adjustment.

The adjusted fair value of net identifiable assets acquired is computed as follows:

Fair value of identifiable assets acquired	3,200,000
Fair value of unrecorded patent	200,000
Adjusted fair value of identifiable assets acquired	*3,400,000*
Fair value of liabilities assumed	(1,800,000)
Adjusted fair value of net identifiable assets acquired	***1,600,000***

The adjusted goodwill is computed as follows:

		Unadjusted	***Adjusted***
(1)	Consideration transferred	2,000,000	2,000,000
(2)	Non-controlling interest in the acquiree	-	-
(3)	Previously held equity interest in the acquiree	-	-
	Total	2,000,000	2,000,000
	Fair value of net identifiable assets acquired	(1,400,000)	(1,600,000)
	Goodwill	600,000	***400,000***

The measurement period adjusting entries are as follows:

July 1, 20x2	Patent Goodwill	200,000	 200,000
July 1, 20x2	Retained earnings (200K ÷ 4 x 3/12) Accumulated amortization	12,500	 12,500

Case #3:
Because the new information is obtained ***after the measurement period*** (i.e., beyond one year from September 30, 20x1), INNOCUOUS should account for the new information in accordance with PAS 8 as ***correction of error***. PAS 8 requires the correction of an error to be accounted for ***retrospectively*** and for the financial statements to be presented as if the error had never occurred by correcting the prior period's information.

Adjustments shall be made similar to those in Case #2; however, the disclosures provided in the notes will vary because of the application of PAS 8 instead of PFRS 3.

The correcting entries on the 20x1 financial statements are as follows:

Nov. 1, 20x2	Patent Goodwill	200,000	 200,000
Nov. 1, 20x2	Retained earnings (200K ÷ 4 x 3/12) Accumulated amortization	12,500	 12,500

7. The new information obtained on ***April 1, 20x2*** shall be accounted for as measurement period adjustment because it provides evidence of facts and circumstances that, if known, would have affected the measurement of the amounts recognized as of September 30, 20x1.

The new information obtained on ***July 1, 20x2*** shall ***not*** be accounted for as a measurement period adjustment because it relates to facts and circumstances that have ***not*** existed as of acquisition date. However, this information may necessitate impairment testing on the goodwill recognized. Any impairment shall be recognized in ***profit or loss*** (see discussion later in this chapter).

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The adjusted goodwill is computed as follows:

		Unadjusted	***Adjusted***
(1)	Consideration transferred	2,000,000	2,000,000
(2)	Non-controlling interest in the acquiree	-	-
(3)	Previously held equity interest in the acquiree	-	-
	Total	2,000,000	2,000,000
	Fair value of net identifiable assets acquired	(1,400,000)	(1,600,000)
	Goodwill	600,000	***400,000***

The measurement period adjusting entry on April 1, 20x2 is as follows:

Apr. 1, 20x2	Net identifiable assets	200,000	
	Goodwill		200,000

8. Solution:

The consideration transferred on the business combination is computed as follows:

Cash payment on business combination	2,000,000
Additional payment to TRANSPARENT's former owner	100,000
Consideration transferred on the business combination	***3,100,000***

The fair value of net identifiable assets acquired is computed as follows:

Fair value of identifiable assets	2,200,000
Acquisition-date fair value of inventory not transferred to DIAPHANOUS	(180,000)
Adjusted fair value of identifiable assets acquired	*3,020,000*
Fair value of liabilities assumed	(1,800,000)
Adjusted fair value of net identifiable assets acquired	***1,220,000***

Goodwill (gain on bargain purchase) is computed as follows:

(1) Consideration transferred	2,100,000

(2)	Non-controlling interest in the acquiree	-
(3)	Previously held equity interest in the acquiree	-
	Total	*2,100,000*
	Fair value of net identifiable assets acquired	(1,220,000)
	Goodwill	***880,000***

9. Solution:

The consideration transferred on the business combination is computed as follows:

Cash payment	2,000,000
Payment for the settlement of pre-existing relationship ("off-market value)	(160,000)
Consideration transferred on the business combination	***1,840,000***

The fair value of net identifiable assets acquired is computed as follows:

Fair value of SLAVE's identifiable assets	3,200,000
Identifiable intangible asset on ***reacquired rights***	80,000
Carrying amount of asset related to the reacquired rights – prepayment	(100,000)
Adjusted fair value of identifiable assets acquired	*3,180,000*
Fair value of liabilities assumed	(1,800,000)
Fair value of net identifiable assets acquired	***1,380,000***

Goodwill (gain on bargain purchase) is computed as follows:

(1)	Consideration transferred	1,840,000
(2)	Non-controlling interest in the acquiree	-
(3)	Previously held equity interest in the acquiree	-
	Total	*1,840,000*
	Fair value of net identifiable assets acquired	(1,380,000)
	Goodwill	***460,000***

10. Solution:

Because the settlement of the pre-existing relationship is treated as a ***separate transaction***, the amount attributed to the settlement loss (i.e., P180,000) shall be accounted for as ***payment for the settlement*** of the pre-existing relationship. Therefore, the ***adjusted***

consideration transferred on the business combination is ***P1,820,000*** (P2M – P180,000).

The "at-market" value of P140,000 shall be subsumed in goodwill because there is ***no*** reacquired right.

Goodwill (gain on bargain purchase) is computed as follows:

(1) Consideration transferred	1,820,000
(2) Non-controlling interest in the acquiree	-
(3) Previously held equity interest in the acquiree	-
Total	*1,820,000*
Fair value of net identifiable assets acquired	(1,400,000)
Goodwill	***420,000***

11. Solution:

The consideration transferred on the business combination is computed as follows:

Cash payment	2,000,000
Payment for the settlement of pre-existing relationship (fair value)	(200,000)
Consideration transferred on the business combination	***1,800,000***

The settlement gain or loss is computed as follows:

Payment for the settlement of pre-existing relationship (fair value)	200,000
Carrying amount of estimated liability on pending lawsuit	(260,000)
Settlement gain	***60,000***

There is gain because the liability is settled for a lower amount.

Goodwill (gain on bargain purchase) is computed as follows:

(1) Consideration transferred	1,800,000
(2) Non-controlling interest in the acquiree	-
(3) Previously held equity interest in the acquiree	-
Total	*1,800,000*
Fair value of net identifiable assets acquired	(1,400,000)
Goodwill	***400,000***

12. Solution:

The consideration transferred on the business combination is computed as follows:

Cash payment	2,000,000
Fair value of contingent consideration	20,000
Consideration transferred on the business combination	*2,020,000*

Goodwill (gain on bargain purchase) is computed as follows:

(1)	Consideration transferred	2,020,000
(2)	Non-controlling interest in the acquiree	-
(3)	Previously held equity interest in the acquiree	-
	Total	*2,020,000*
	Fair value of net identifiable assets acquired	(1,400,000)
	Goodwill	***620,000***

13. Solution:

The consideration transferred on the business combination is computed as follows:

Fair value of shares issued	2,000,000
Fair value of contingent consideration	180,000
Consideration transferred on the business combination	*2,180,000*

Goodwill (gain on bargain purchase) is computed as follows:

(1)	Consideration transferred	2,180,000
(2)	Non-controlling interest in the acquiree	-
(3)	Previously held equity interest in the acquiree	-
	Total	*2,180,000*
	Fair value of net identifiable assets acquired	(1,400,000)
	Goodwill	***780,000***

14. Solution:

The adjusted fair value of net identifiable assets acquired is computed as follows:

Fair value of identifiable assets acquired	3,200,000
Fair value of liabilities assumed	1,800,000
Fair value of *contractual* contingent liability assumed	20,000
Fair value of *contractual* contingent liability assumed	60,000
Fair value of *noncontractual* contingent liability assumed	100,000
Total fair value of liabilities assumed	1,980,000
Fair value of net identifiable assets acquired	*1,220,000*

Goodwill (gain on bargain purchase) is computed as follows:

(1)	Consideration transferred	2,000,000
(2)	Non-controlling interest in the acquiree	160,000
(3)	Previously held equity interest in the acquiree	-
	Total	*2,160,000*
	Fair value of net identifiable assets acquired	(1,220,000)
	Goodwill	***940,000***

15. Solution:
The adjusted fair value of net identifiable assets acquired is computed as follows:

Fair value of identifiable assets acquired		3,200,000
Fair value of liabilities assumed	1,800,000	
Fair value of *contractual* contingent liability assumed	200,000	(2,000,000)
Fair value of net identifiable assets acquired		*1,200,000*

Goodwill (gain on bargain purchase) is computed as follows:

(1)	Consideration transferred	2,000,000
(2)	Non-controlling interest in the acquiree	160,000
(3)	Previously held equity interest in the acquiree	-
	Total	*2,160,000*

Fair value of net identifiable assets acquired	(1,200,000)
Goodwill	***960,000***

Chapter 15 – Business Combinations (Part 3)

Multiple Choice – Theory

1. D
2. B
3. A
4. A

Multiple Choice – Computational

Answers at a glance:

1. D	6. B	11. A
2. A	7. A	12. D
3. A	8. D	13. B
4. C	9. D	14. A
5. C	10. B	

Solution:

1. D

Solution:

Total earnings for the last 5 years	27,600,000	
Less: Expropriation gain	(1,600,000)	
Normalized earnings for the last 5 years	26,000,000	
Divide by:	5	
(a) *Average annual earnings*		5,200,000
Fair value of acquiree's net assets	40,000,000	
Multiply by: Normal rate of return	12%	
(b) *Normal earnings*		4,800,000
Excess earnings **(a) – (b)**		*400,000*
Multiply by: Probable duration of excess earnings		5
Goodwill		***2,000,000***

2. A

Solution:

Average earnings (27.6M – 1.6M expropriation gain) ÷ 5 yrs.	5,200,000
Normal earnings in the industry (40M x 12%)	(4,800,000)
Excess earnings	*400,000*

Divide by: Capitalization rate	25%
Goodwill	***1,600,000***

3. A

Solution:

Average earnings (27.6M – 1.6M expropriation gain) ÷ 5 yrs.	5,200,000
Divide by: Capitalization rate	12.5%
Estimated purchase price	41,600,000
Fair value of XYZ's net assets	(40,000,000)
Goodwill	***1,600,000***

4. C

Solution:

Average earnings (27.6M – 1.6M expropriation gain) ÷ 5 yrs.	5,200,000
Normal earnings in the industry (40M x 12%)	(4,800,000)
Excess earnings	*400,000*
Multiply by: PV of an ordinary annuity @10%, n=5	3.79079
Goodwill	***1,516,316***

5. C

Solution:

Average earnings (2,600,000 ÷ 5 years)	520,000
Normal earnings on average net assets [10% x (11M ÷ 5)]	(220,000)
Excess earnings	*300,000*
Divide by: Capitalization rate	30%
Goodwill	1,000,000
Add: Fair value of net identifiable assets acquired	2,360,000
Estimated purchase price	***3,360,000***

6. B

Solution:

Average earnings (2,600,000 ÷ 5 years)	520,000
Divide by: Capitalization rate	16%
Estimated purchase price	***3,250,000***
Fair value of net identifiable assets acquired	(2,360,000)
Goodwill	*890,000*

7. A *(See solution above)*

8. D

Solution:

Average earnings	5,200,000
Normal earnings (12% x ***40M****)	(4,800,000)
Excess earnings	*400,000*
Multiply by: PV of an ordinary annuity @10%, n=5	3.79079
Goodwill	*1,516,316*

*The fair value of XYZ's net assets is computed as follows:

Carrying amount of equity	36,000,000
Excess of fair value of one asset over its carrying amount	4,000,000
Fair value of XYZ's net assets	*40,000,000*
Purchase price (squeeze)	***41,516,316***
Fair value of net assets acquired	(40,000,000)
Goodwill	1,516,316

9. D

Solution:

Average earnings (squeeze)	***5,200,000***	
(squeeze)		
Normal earnings on net assets [12% x ***40M****]	(4,800,000)	
Excess earnings	*400,000*	
Divide by: Capitalization rate	25%	
Goodwill *(given)*	1,600,000	***(start)***

*The net assets of XYZ is computed as follows:

Purchase price *(given)*	41,600,000
Fair value of net assets acquired ***(squeeze)***	*(40,000,000)*
Goodwill *(given)*	1,600,000

10. B

Solution:

Goodwill is computed as follows:

	DREARY	***DISMAL***
Average annual earnings	320,000	480,000
Normal earnings on net assets	(160,000)	(240,000)
Excess earnings	160,000	240,000
Divide by: Capitalization rate	20%	20%
Goodwill	*800,000*	*1,200,000*

Total contributions are computed as follows:

	DREARY	***DISMAL***	***Totals***
Total contributions			
(squeeze)	***2,400,000***	***3,600,000***	***6,000,000***
Fair value of net assets	(1,600,000)	(2,400,000)	(4,000,000)
Goodwill	800,000	1,200,000	2,000,000

11. A *(See solution above)*

12. D
Solution:

	DREARY	***DISMAL***	***Totals***
Net asset contributions	,1600,000	2,400,000	4,000,000
Divide by: Par value per share of PS	400	400	400
Number of preference shares issued	*4,000*	*6,000*	*10,000*
Total contributions	2,400,000	3,600,000	6,000,000
Net asset contributions	(1,600,000)	(2,400,000)	(4,000,000)
Excess of total contributions	800,000	1,200,000	2,000,000
Divide by: Par value per share of OS	200	200	200
Number of ordinary shares issued	*4,000*	*6,000*	*10,000*
Total PS and OS issued	*8,000*	*12,000*	*20,000*
Ratio of shares issued	***40%***	***60%***	***100%***

13. B
Solution:
Analyses:

- ZYX, Inc. lets itself be acquired (***legal form***) for it to gain control over the legal acquirer (***substance***).

Legal form of the agreement: *(ZYX lets itself be acquired)*
CBA Co. issues 40,000 ordinary shares to ZYX, Inc.'s shareholders in exchange for all of ZYX, Inc.'s 8,000 shares outstanding.

Substance of the agreement: *(ZYX gains control over legal acquirer)*
After the combination, ZYX, Inc. gains control because it now owns 80% of CBA Co.

Accounting acquiree (CBA Co.) issues shares – Actual:

CBA's currently issued shares	10,000	***20 %***
Shares to be issued to ZYX (5 sh. x 8,000 sh.)	40,000	***80 %***
Total shares of CBA Co. after the combination	*50,000*	

Accounting acquirer (ZYX, Inc.) issues shares – Reverse:

ZYX's currently issued shares	8,000	80 %
Shares to be issued to CBA's shareholders to enable them to have ***the same interest*** in ZYX, Inc. [(8,000 ÷ ***80%***) x ***20%***]	***2,000***	20 %

Total	*10,000*

The consideration transferred is computed as follows:

Shares of ZYX ***effectively*** transferred to CBA	2,000
Multiply by: Fair value per share of ***ZYX***'s shares	800
Fair value of consideration effectively transferred	***1,600,000***

Goodwill (gain on bargain purchase) is computed as follows:

Consideration transferred	1,600,000
Non-controlling interest in the acquiree	-
Previously held equity interest in the acquiree	-
Total	*1,600,000*
Fair value of net identifiable assets acquired (6.4M – 5.2M)	(1,200,000)
Goodwill	***400,000***

14. A

Solution:

Consideration transferred	4,000,000
Non-controlling interest in the acquiree	-
Previously held equity interest in the acquiree	-
Total	*4,000,000*
Fair value of net identifiable assets acquired	(3,200,000)
Goodwill	***800,000***

Exercises

1. Solutions:

Method #1: **Multiples of average excess earnings**

Average earnings (13.8M – .8M expropriation gain) ÷ 5 years	2,600,000
Normal earnings in the industry (20M x 12%)	(2,400,000)
Excess earnings	*200,000*
Multiply by: Probable duration of excess earnings	5
Goodwill	***1,000,000***

Method #2: **Capitalization of average excess earnings**

Average earnings (13.8M – .8M expropriation gain) ÷ 5 years	2,600,000
Normal earnings in the industry (20M x 12%)	(2,400,000)
Excess earnings	*200,000*
Divide by: Capitalization rate	25%
Goodwill	***800,000***

Method #3: **Capitalization of average earnings**

Average earnings (13.8M – .8M expropriation gain) ÷ 5 years	2,600,000
Divide by: Capitalization rate	12.5%

Estimated purchase price	20,800,000
Fair value of acquiree's net assets	(20,000,000)
Goodwill	***800,000***

***Method #4:* Present value of average excess earnings**

Average earnings (13.8M – .8M expropriation gain) ÷ 5 years	2,600,000
Normal earnings in the industry (20M x 12%)	(2,400,000)
Excess earnings	*200,000*
Multiply by: PV of an ordinary annuity @10%, n=5	3.79079
Goodwill	***758,158***

2. Solutions:

Case #1: Excess earnings

Average earnings (1,300,000 ÷ 5 years)	260,000
Normal earnings on average net assets [10% x (5.5M ÷ 5)]	(110,000)
Excess earnings	*150,000*
Divide by: Capitalization rate	30%
Goodwill	500,000
Add: Fair value of net identifiable assets acquired	1,180,000
Estimated purchase price	***1,680,000***

Case #2: Average earnings

Average earnings (1,300,000 ÷ 5 years)	260,000
Divide by: Capitalization rate	16%
Estimated purchase price	***1,625,000***
Fair value of net identifiable assets acquired	(1,800,000)
Goodwill	***445,000***

3. Solution:

Average earnings	2,600,000
Normal earnings (12% x ***20M****)	(2,400,000)
Excess earnings	*200,000*
Multiply by: PV of an ordinary annuity @10%, n=5	3.79079
Goodwill	*758,158*

*The fair value of THICKEN's net assets is computed as follows:

Carrying amount of equity	18,000,000
Excess of fair value of one asset over its carrying amount	2,000,000
Fair value of THICKEN's net assets	*20,000,000*

Purchase price (squeeze)	***20,758,158***
Fair value of net assets acquired	(20,000,000)

Goodwill	758,158

4. Solution:

Average earnings (squeeze)	***2,600,000***	
(squeeze)		
Normal earnings on net assets [12% x (***20M***)	(2,400,000)	
Excess earnings	*200,000*	
Divide by: Capitalization rate	25%	
Goodwill *(given)*	800,000	***(start)***

*The net assets of HISS is computed as follows:

Purchase price *(given)*	20,800,000
Fair value of net assets acquired ***(squeeze)***	***(20,000,000)***
Goodwill *(given)*	800,000

5. Solutions:

Requirement (a):

Goodwill is computed as follows:

	DREARY Co.	***DISMAL, Inc.***
Average annual earnings	160,000	240,000
Normal earnings on net assets	(80,000)	(120,000)
Excess earnings	80,000	120,000
Divide by: Capitalization rate	20%	20%
Goodwill	***400,000***	***600,000***

Total contributions are computed as follows:

	DREARY Co.	***DISMAL, Inc.***	***Totals***
Total contributions (squeeze)	***1,200,000***	***1,800,000***	***3,000,000***
Fair value of net assets	(800,000)	(1,200,000)	(2,000,000)
Goodwill	400,000	600,000	1,000,000

Requirement (b):

The number of preference shares to be issued to each of the combining constituents is computed as follows:

	DREARY Co.	***DISMAL, Inc.***	***Totals***
Net asset contributions	800,000	1,200,000	2,000,000
Divide by: Par value per share of PS	200	200	200

Number of preference shares issued	*4,000*	*6,000*	*10,000*
Total contributions	1,200,000	1,800,000	3,000,000
Net asset contributions	(800,000)	(1,200,000)	(2,000,000)
Excess of total contributions	400,000	600,000	1,000,000
Divide by: Par value per share of OS	100	100	100
Number of ordinary shares issued	*4,000*	*6,000*	*10,000*
Total PS and OS issued	*8,000*	*12,000*	*20,000*
Ratio of shares issued	***40%***	***60%***	***100%***

6. Solution:

Accounting acquiree (CBA Co.) issues shares – Legal form:

	Actual	***%***
CBA's currently issued shares	10,000	***20%***
Shares to be issued to ZYX (5 sh. x 8,000 sh.)	40,000	***80%***
Total shares of CBA Co. after the combination	*50,000*	

Accounting acquirer (ZYX, Inc.) issues shares – Substance:

	Reverse	***%***
ZYX's currently issued shares	8,000	80%
Shares to be issued to CBA's shareholders to enable them to have ***the same interest*** in ZYX, Inc. [(8,000 ÷ ***80%***) x ***20%***]	***2,000***	20%
Total	*10,000*	

As a result, the fair value of the consideration effectively transferred by ZYX and the group's interest in CBA is ***P800,000*** (***2,000*** shares of ZYX, Inc. with a fair value per share of P400).

Goodwill (gain on bargain purchase) is computed as follows:

(1)	Consideration transferred (2,000 x P400)	800,000
(2)	Non-controlling interest in the acquiree	-
(3)	Previously held equity interest in the acquiree	-
	Total	*800,000*
	Fair value of net identifiable assets acquired	(600,000)
	Goodwill	***200,000***

7. Solution:

(1)	Consideration transferred	2,000,000
(2)	Non-controlling interest in the acquiree	-
(3)	Previously held equity interest in the acquiree	-
	Total	*2,000,000*
	Fair value of net identifiable assets acquired	(1,600,000)
	Goodwill	***400,000***

Chapter 16 – Consolidated Financial Statements (Part 1)

Multiple Choice – Theory

1. A
2. D
3. C
4. A
5. B
6. B

Multiple Choice – Computational

Answers at a glance:

1. A
2. C
3. B
4. B
5. B
6. D
7. A
8. B
9. B
10. D

Solution:

1. A

Solution:

Total assets of parent	1,040,000
Total assets of subsidiary	320,000
Investment in subsidiary	-
Fair value adjustments - net	64,000
Goodwill – net*	12,000
Effect of intercompany transactions	-
Consolidated total assets	***1,436,000***

*Consideration transferred (5,000 sh. x 60)	300,000
Non-controlling interest in the acquiree (360,000 x 20%)	72,000
Previously held equity interest in the acquire	-
Total	*372,000*
Fair value of net identifiable assets acquired	(360,000)
Goodwill	*12,000*

2. C

Solution:

Share capital of parent [480,000 + (5,000sh. x 40par)]	680,000
Share premium of parent {160,000 + [5,000sh. x (60 – 40)]}	260,000
Consolidated retained earnings – (parent only)	200,000
Equity attributable to owners of the parent	1,140,000
Non-controlling interests (360,000 x 20%)	72,000
Consolidated total equity	***1,212,000***

3. B

Solution:

Total assets of parent	1,040,000
Total assets of subsidiary	320,000
Investment in subsidiary	-
Fair value adjustments - net	64,000
Goodwill – net*	15,000
Effect of intercompany transactions	-
Consolidated total assets	***1,439,000***

*Consideration transferred (5,000 sh. x 60)	300,000
Non-controlling interest in the acquiree	75,000
Previously held equity interest in the acquire	-
Total	*375,000*
Fair value of net identifiable assets acquired	(360,000)
Goodwill	*15,000*

4. B

Solution:

Share capital of parent [480,000 + (5,000sh. x 40par)]	680,000
Share premium of parent {160,000 + [5,000sh. x (60 – 40)]}	260,000
Consolidated retained earnings – (parent only)	200,000
	1,140,00
Equity attributable to owners of the parent	0
Non-controlling interests	75,000
Consolidated total equity	***1,215,000***

5. B

Solution:

	Parent	***Subsidiary***	***Consolidated***
Profits before adjustments	240,000	80,000	320,000
Consolidation adjustments:			
Unrealized profits	(-)	(-)	(-)
Dividend income from subsidiary	(-)	N/A	(-)
Gain or loss on extinguishment of bonds	(-)	(-)	(-)
Net consolidation adjustments	(-)	(-)	(-)
Profits before FVA	*240,000*	*80,000*	320,000
Depreciation of FVA*	(32,000)	(8,000)	(40,000)
Impairment loss on goodwill	(-)	(-)	(-)
Consolidated profit	208,000	72,000	***280,000***

*The subsequent depreciation of fair value adjustments (FVA) is determined as follows:

	Fair value adjustments	***Divide by useful life***	***Subsequent depreciation***
Inventory	32,000	N/A	32,000
Equipment	40,000		
Accumulated depreciation	(8,000)		
Equipment – net	32,000	4	8,000
Totals	*64,000*		***40,000***

Parent's share = 40,000 x 80% = 32,000

Subsidiary's share = 40,000 x 20% = 8,000

6. D

Solution:

Total assets of parent	1,672,000
Total assets of subsidiary	496,000
Investment in subsidiary	(300,000)
Fair value adjustments – net (64,000 – 40,000 dep'n.)	24,000
Goodwill – net*	12,000
Effect of intercompany transactions	-
Consolidated total assets	***1,904,000***

*Consideration transferred (5,000 sh. x 60)	300,000
Non-controlling interest in the acquiree (360K x 20%)	72,000
Previously held equity interest in the acquire	-
Total	*372,000*
Fair value of net identifiable assets acquired	(360,000)
Goodwill	*12,000*

7. A

Solution:

Analysis of net assets

Subsidiary	***Acquisition date***	***Consolidation date***	***Net change***
Share capital (& Share premium)	200,000	200,000	
Retained earnings	96,000	176,000	
Totals at carrying amounts	296,000	376,000	
FVA at acquisition	64,000	64,000	
Subsequent depn. Of FVA	NIL	(40,000)	
Unrealized profits (Upstream only)	NIL	-	
Net assets at fair value	*360,000*	*400,000*	***40,000***

NCI in net assets	
XYZ's net assets at fair value – Dec. 31, 20x1	400,000
Multiply by: NCI percentage	20%
Total	80,000
Add: Goodwill to NCI *net* of accumulated impairment losses	-
Non-controlling interest in net assets – Dec. 31, 20x1	***80,000***

Consolidated retained earnings		
ABC's retained earnings – Dec. 31, 20x1		440,000
Consolidation adjustments:		
ABC's share in the ***net change*** in XYZ's net assets [(a)]	32,000	
Unrealized profits (Downstream only)	-	
Gain or loss on extinguishment of bonds	-	
Impairment loss on goodwill attributable to parent	-	
Net consolidation adjustments		32,000
Consolidated ret. earnings – Dec. 31, 20x1		***472,000***

[(a)] (40,000 net change in net assets x 80%) = 32,000

Share capital of parent	680,000
Share premium	260,000
Consolidated retained earnings – *(see above)*	472,000
Equity attributable to owners of the parent	1,412,000
Non-controlling interests - *(see above)*	80,000
Consolidated total equity	***1,492,000***

8. B

Solution:

	Parent	***Subsidiary***	***Consolidated***
Profits before adjustments	240,000	80,000	320,000
Consolidation adjustments:			
Unrealized profits	(-)	(-)	(-)
Dividend income from subsidiary	(-)	N/A	(-)
Gain or loss on extinguishment of bonds	(-)	(-)	(-)
Net consolidation adjustments	(-)	(-)	(-)
Profits before FVA	*240,000*	*80,000*	320,000
Depreciation of FVA*	(32,000)	(8,000)	(40,000)
Impairment loss on goodwill	(-)	(-)	(-)
Consolidated profit	208,000	72,000	***280,000***

*The subsequent depreciation of fair value adjustments (FVA) is determined as follows:

	Fair value adjustments	***Divide by useful life***	***Subsequent depreciation***
Inventory	32,000	N/A	32,000
Equipment	40,000		
Accumulated depreciation	(8,000)		
Equipment – net	32,000	4	8,000
Totals	*64,000*		***40,000***

9. B

Solution:

Total assets of parent	1,672,000
Total assets of subsidiary	496,000
Investment in subsidiary	(300,000)
Fair value adjustments – net (64,000 – 40,000 dep'n.)	24,000
Goodwill – net*	15,000
Effect of intercompany transactions	-
Consolidated total assets	***1,907,000***

* Consideration transferred (5,000 x 60)	300,000
Previously held equity interest in the acquiree	-
Total	300,000
Less: Parent's proportionate share in the net assets of subsidiary (360,000 x 80%)	(288,000)
Goodwill attrib. to owners of parent - acquisition date	12,000
Less: Parent's share in goodwill impairment	-
Goodwill attrib. to owners of parent	*12,000*
Fair value of NCI	75,000
Less: NCI's proportionate share in net assets of subsidiary (360,000 x 20%)	(72,000)
Goodwill attributable to NCI - acquisition date	3,000
Less: NCI's share in goodwill impairment	-
Goodwill attributable to NCI – current year	*3,000*
Goodwill, net – current year	***15,000***

10. B

Solution:

Analysis of net assets

Subsidiary	***Acquisition date***	***Consoli-dation date***	***Net change***
Share capital (& Share premium)	200,000	200,000	
Retained earnings	96,000	176,000	
Totals at carrying amounts	296,000	376,000	
FVA at acquisition	64,000	64,000	
Subsequent depn. Of FVA	NIL	(40,000)	
Unrealized profits (Upstream only)	NIL	-	
Net assets at fair value	*360,000*	*400,000*	***40,000***

NCI in net assets	
XYZ's net assets at fair value – Dec. 31, 20x1	400,000
Multiply by: NCI percentage	20%
Total	80,000
Add: Goodwill to NCI *net* (see goodwill computation above)	3,000
NCI in net assets – Dec. 31, 20x1	***83,000***

Consolidated retained earnings		
ABC's retained earnings – Dec. 31, 20x1		440,000
Consolidation adjustments:		
ABC's share in the ***net change*** in XYZ's net assets (40,000 x 80%)	32,000	
Unrealized profits (Downstream only)	-	
Gain or loss on extinguishment of bonds	-	
Impairment loss on goodwill attributable to parent	-	
Net consolidation adjustments		32,000
Consolidated ret. earnings – Dec. 31, 20x1		***472,000***

Share capital of parent	680,000
Share premium	260,000
Consolidated retained earnings – *(see above)*	472,000

	1,412,00
Equity attributable to owners of the parent	0
Non-controlling interests - *(see above)*	83,000
Consolidated total equity	***1,415,000***

Exercises

1. Solutions:

The acquisition will be recorded by ABC Co. as follows:

Jan. 1, 20x1	***Investment in subsidiary*** (5,000 x 30)	150,000	
	Share capital (5,000 x 20)		100,000
	Share premium		50,000

After recording the entry above, the ***individual*** financial statements of ABC Co. and XYZ, Inc. immediately ***after*** the acquisition are shown below:

	Before acquisition		***After acquisition***	
	ABC Co.	***XYZ, Inc.***	***ABC Co.***	***XYZ, Inc.***
Cash	20,000	10,000	20,000	10,000
Accounts receivable	60,000	24,000	60,000	24,000
Inventory	80,000	46,000	80,000	46,000
Investment in subsidiary			***150,000***	
Equipment	400,000	100,000	400,000	100,000
Accumulated depreciation	(40,000)	(20,000)	(40,000)	(20,000)
Total assets	*520,000*	*160,000*	*670,000*	*160,000*
	-	-	-	-
Accounts payable	40,000	12,000	40,000	12,000
Bonds payable	60,000	-	60,000	-
Share capital	240,000	100,000	***340,000***	100,000
Share premium	80,000	-	***130,000***	-
Retained earnings	100,000	48,000	100,000	48,000
Total liabilities and equity	*520,000*	*160,000*	*670,000*	*160,000*

Case #1: Non-controlling interest's proportionate share in net assets

Goodwill is computed as follows:

(1)	Consideration transferred	150,000
(2)	Non-controlling interest in the acquiree (180K x 20%)	***36,000***
(3)	Previously held equity interest in the acquire	-
	Total	*186,000*
	Fair value of net identifiable assets acquired	(180,000)
	Goodwill	***6,000***

The ***consolidation journal entry*** is as follows:

CJE #1: *To recognize goodwill and eliminate investment in subsidiary*

Jan. 1, 20x1	Inventory	16,000	
	Equipment	20,000	
	Share capital – XYZ, Inc.	100,000	
	Retained earnings – XYZ, Inc.	48,000	
	Goodwill	***6,000***	
	Investment in subsidiary		
	Non-controlling interest		150,000
	Accumulated depreciation		***36,000***
	to adjust the subsidiary's assets to acquisition-date fair value, to eliminate investment in subsidiary and subsidiary's pre-combination equity, and to recognize goodwill and non-controlling interest in the consolidated financial statements		4,000

The ***consolidation working paper*** for the preparation of the ***consolidated*** statement of financial position as of January 1, 20x1 is shown below:

	ABC Co.	XYZ, Inc.	CJE ref. #	Consolidation adjustments Dr.	Consolidation adjustments Cr.	CJE ref. #	Consolidated
ASSETS							
Cash	20,000	10,000					30,000
Accounts receivable	60,000	24,000					84,000
Inventory	80,000	46,000	*1*	16,000			142,000
Investment in subsidiary	150,000	-			150,000	*1*	-
Equipment	400,000	100,000	*1*	20,000			520,000

Accumulated depreciation	(40,000)	(20,000)			4,000	*1*	(64,000)
Goodwill	-	-	*1*	6,000			6,000
TOTAL ASSETS	*670,000*	*248,000*					***718,000***
LIABILITIES AND EQUITY							
Accounts payable	40,000	12,000					52,000
Bonds payable	60,000	-					60,000
Total liabilities	*100,000*	*12,000*					*112,000*
Share capital	340,000	100,000	*1*	100,000			340,000
Share premium	130,000	-					130,000
Retained earnings	100,000	48,000	*1*	48,000			100,000
Non-controlling interest	-	-			36,000	*1*	36,000
Total equity	*570,000*	*148,000*					*606,000*
TOTAL LIAB. & EQTY.	*670,000*	*160,000*		190,000	190,000		***718,000***

ABC Group
Consolidated statement of financial position
As of January 1, 20x1

ASSETS	
Cash	30,000
Accounts receivable	84,000
Inventory	142,000
Equipment	520,000
Accumulated depreciation	(64,000)
Goodwill	6,000
TOTAL ASSETS	*718,000*
LIABILITIES AND EQUITY	
Accounts payable	52,000
Bonds payable	60,000
Total liabilities	*112,000*

Share capital	340,000
Share premium	130,000
Retained earnings	100,000
Owners of parent	*570,000*
Non-controlling interest	36,000
Total equity	606,000
TOTAL LIABILITIES AND EQUITY	*718,000*

Requirement (b):

Goodwill is computed as follows:

(1)	Consideration transferred	150,000
(2)	Non-controlling interest in the acquiree	***37,500***
(3)	Previously held equity interest in the acquire	-
	Total	*187,500*
	Fair value of net identifiable assets acquired	(180,000)
	Goodwill	***7,500***

CJE #1: The ***consolidation journal entry*** is as follows:

Jan. 1, 20x1	Inventory	16,000	
	Equipment	20,000	
	Share capital – XYZ, Inc.	100,000	
	Retained earnings – XYZ, Inc.	48,000	
	Goodwill	***7,500***	
	Investment in subsidiary		150,000
	Non-controlling interest		***37,500***
	Accumulated depreciation		4,000

The ***consolidation working paper*** for the preparation of the ***consolidated*** statement of financial position as of January 1, 20x1 is shown below:

	ABC Co.	***XYZ, Inc.***	***CJE Ref. #***	***Consolidation adjustments***		***CJE Ref. #***	***Consolidated***
ASSETS				***Dr.***	***Cr.***		
Cash	20,000	10,000					30,000
Accounts receivable	60,000	24,000					84,000
Inventory	80,000	46,000	***1***	16,000			142,000

Investment in subsidiary	150,000	-			150,000	*1*	-
Equipment	400,000	100,000	*1*	20,000			520,000
Accumulated depreciation	(40,000)	(20,000)			4,000	*1*	(64,000)
Goodwill	-	-	*1*	7,500			7,500
TOTAL ASSESTS	*670,000*	*248,000*					***719,500***
LIABILITIES AND EQUITY							
Accounts payable	40,000	12,000					52,000
Bonds payable	60,000	-					60,000
Total liabilities	*100,000*	*12,000*					*112,000*
Share capital	340,000	100,000	*1*	100,000			340,000
Share premium	130,000	-					130,000
Retained earnings	100,000	48,000	*1*	48,000			100,000
Non-controlling interest	-	-			37,500	*1*	37,500
Total equity	*570,000*	*148,000*					*607,500*
TOTAL LIAB. & EQTY.	*670,000*	*160,000*		*191,500*	*191,500*		***719,500***

ABC Group
Consolidated statement of financial position
As of January 1, 20x1

ASSETS	
Cash	30,000
Accounts receivable	84,000
Inventory	142,000
Equipment	520,000
Accumulated depreciation	(64,000)
Goodwill	7,500
TOTAL ASSETS	*719,500*

LIABILITIES AND EQUITY	
Accounts payable	52,000
Bonds payable	60,000
Total liabilities	*112,000*
Share capital	340,000
Share premium	130,000
Retained earnings	100,000
Owners of parent	*570,000*
Non-controlling interest	37,500
Total equity	607,500
TOTAL LIABILITIES AND EQUITY	*719,500*

2. Solution:

Analysis of net assets

Acquiree	***Acqui-sition date***	***Consolidation date***	***Net change***
Share capital	100,000	100,000	
Retained earnings	48,000	88,000	
Other components of equity	-	-	
Total at carrying amounts	148,000	188,000	
Fair value adjustments at acquisition date	32,000	32,000	
Subsequent depreciation/amortization of fair value	NIL	(20,000)*	
Unrealized profits (Upstream only)	NIL	-	
Subsidiary's net assets at fair value	***180,000***	***200,000***	***20,000***

*The subsequent depreciation/amortization of fair value is determined as follows:

	Incremental fair value	***Divide by useful life***	***Subsequent amort'n./depr'n.***
Inventory	16,000	1**	16,000
Equipment	20,000		
Accumulated depreciation	(4,000)		
Carrying amount	16,000	4	4,000
Totals	***32,000***		***20,000***

**The inventory is assumed to have been sold during the year.

Goodwill computation

(1) Consideration transferred	150,000
(2) Non-controlling interest in the acquiree	36,000
(3) Previously held equity interest in the acquire	-
Total	*186,000*
Fair value of net identifiable assets acquired	(180,000)
Goodwill at acquisition date	*6,000*
Accumulated impairment losses since acquisition date	(-)
Goodwill, net – current year	***6,000***

NCI in net assets computation

Acquiree's net assets at fair value – Dec. 31, 20x1	200,000
Multiply by: NCI percentage	20%
Total	40,000
Add: Goodwill to NCI *net* of accumulated impairment losses	-
Non-controlling interest in net assets – Dec. 31, 20x1	***40,000***

Consolidated retained earnings computation

Acquirer's retained earnings – Dec. 31, 20x1		220,000
Consolidation adjustments:		
Acquirer's share in the ***net change*** in acquiree's net assets [(a)]	16,000	
Unrealized profits (Downstream only)	-	
Gain or loss on extinguishment of bonds	-	
Impairment loss on goodwill attributable to Parent	-	
Net consolidation adjustments		16,000
Consolidated retained earnings – Dec. 31, 20x1		***236,000***

(a)

Net change in acquiree's net assets	20,000
Multiply by: Acquirer's interest in acquiree	80%
Acquirer's share in the net change in acquiree's net assets	***16,000***

Consolidated profit or loss

	Parent	***Subsidiary***	***Consolidated***
	120,000	40,000	160,000
Consolidation adjustments:			
Unrealized profits	(-)	(-)	(-)
Dividend received from subsidiary	(-)	N/A	(-)
Gain or loss on extinguishment of bonds	(-)	(-)	(-)
Net consolidation adjustments	(-)	(-)	(-)
Profits before fair value adjustments	***120,000***	***40,000***	160,000
Depreciation/ amortization of fair values **(b)**	(16,000)	(4,000)	(20,000)
Consolidated profit	104,000	36,000	***140,000***

[(b)] The share in the depreciation/amortization of fair values is computed as follows:

Total depreciation/amortization of fair value	20,000
Allocation:	
Parent's share in depreciation/amortization of fair value (20,000 x 80%)	16,000
NCI's share in depreciation/amortization of fair value (20,000 x 20%)	4,000
As allocated	*20,000*

Profit or loss attributable to owners of parent and to NCI

	Owners of parent	***NCI***	***Consolidated***
Parent's profit before FVA	120,000	N/A	120,000
Share in Acquiree's profit before FVA [(c)]	***32,000***	8,000	40,000
Share in FVA (see **(b)** above)	(16,000)	(4,000)	(20,000)
Totals	***136,000***	***4,000***	***140,000***

[(c)] Shares in XYZ's profit before fair value adjustments (FVA) are computed as follows:

Profit of XYZ before fair value adjustments	40,000
Allocation:	
ABC's share (40,000 x 80%)	32,000

NCI's share (40,000 x 20%)			8,000
As allocated:			*40,000*

CJE #1: *To recognize goodwill and eliminate investment in subsidiary*

Dec. 31, 20x1	Inventory	16,000	
	Equipment	20,000	
	Share capital – XYZ, Inc.	100,000	
	Retained earnings – XYZ, Inc.	48,000	
	Goodwill	***6,000***	
	Investment in subsidiary		150,000
	NCI (acquisition date)		***36,000***
	Accumulated depreciation		4,000

CJE #2: *To recognize depreciation/amortization of fair values assigned to XYZ's net identifiable assets at acquisition date*

Dec. 31, 20x1	Cost of sales	16,000	
	Depreciation expense	4,000	
	Inventory		16,000
	Accumulated depreciation		4,000

CJE #3: *To adjust the Parent's and Subsidiary's retained earnings for FVA recognized in current year*

Dec. 31, 20x1	Retained earnings – ABC (20K x 80%)	16,000	
	Retained earnings – XYZ (20K x 20%)	4,000	
	Income summary – working paper		20,000

CJE #4: *To eliminate the post-acquisition change in XYZ's net assets and to recognize NCI in post-acquisition change in net assets*

Dec. 31, 20x1	Retained earnings – XYZ [(d)]	36,000	
	Retained earnings – ABC [(e)]		32,000
	NCI (post – acquisition) [(f)]		4,000

[(d)] This amount can be simply ***'squeezed'*** after determining (e) and (f) or it can also be computed as follows:

Retained earnings – XYZ, Dec. 31, 20x1	88,000
Elimination of XYZ's acquisition-date retained earnings (see CJE #1)	(48,000)
NCI's share in FVA (see CJE #3)	(4,000)
Remaining balance to be eliminated	*36,000*

[(e)] This represents the parent's share in the profit or loss of the subsidiary.

[(f)] This represents the profit or loss attributable to NCI.

	ABC Co.	XYZ, Inc.	CJE ref. #	Consolidation adjustments		CJE ref. #	Consoli-dated
ASSETS				Dr.	Cr.		
Cash	46,000	114,000					160,000
Accounts receivable	150,000	44,000					194,000
Inventory	210,000	30,000	1	16,000	16,000	2	240,000
Investment in subsidiary	150,000	-			150,000	1	-
Equipment	400,000	100,000	1	20,000			520,000
Accumulated depreciation	(120,000)	(40,000)			8,000	1, 2	(168,000)
Goodwill	-	-	1	6,000			6,000
TOTAL ASSETS	*836,000*	*248,000*					***952,000***
LIABILITIES AND EQUITY							
Accounts payable	86,000	60,000					146,000
Bonds payable	60,000	-					60,000
Total liabilities	*146,000*	*60,000*					*206,000*
Share capital	340,000	100,000	1	100,000			340,000
Share premium	130,000	-					130,000
Retained earnings	220,000	88,000	1, 3, 4	104,000	32,000	4	236,000
Non-controlling interest	-	-			40,000	1, 4	40,000
Total equity	*690,000*	*188,000*					*746,000*
TOTAL LIAB. & EQTY.	*836,000*	*248,000*		*246,000*	*246,000*		***952,000***

	ABC Co.	XYZ, Inc.	CJE ref. #	Consolidation adjustments		CJE ref. #	Consoli-dated
				Dr.	Cr.		

Sales	600,000	240,000			840,000
Cost of goods sold	(330,000)	(144,000)	2	16,000	(490,000)
Gross profit	*270,000*	*96,000*			*350,000*
Depreciation expense	(80,000)	(20,000)	2	4,000	(104,000)
Distribution costs	(64,000)	(36,000)			(100,000)
Interest expense	(6,000)	-			(6,000)
Profit for the year	***120,000***	***40,000***			***140,000***

ABC Group
Consolidated statement of financial position
As of December 31, 20x1

ASSETS	***Dec. 31***	***Jan. 1***
Cash	**160,000**	30,000
Accounts receivable	**194,000**	84,000
Inventory	**240,000**	142,000
Equipment	**520,000**	520,000
Accumulated depreciation	**(168,000)**	(64,000)
Goodwill	**6,000**	6,000
TOTAL ASSETS	***952,000***	*718,000*
LIABILITIES AND EQUITY		
Accounts payable	**146,000**	52,000
Bonds payable	**60,000**	60,000
Total liabilities	***206,000***	*112,000*
Share capital	**340,000**	340,000
Share premium	**130,000**	130,000
Retained earnings	**236,000**	100,000
Owners of parent	***706,000***	*570,000*
Non-controlling interest	**40,000**	36,000
Total equity	**746,000**	606,000
TOTAL LIABILITIES AND EQUITY	***952,000***	*718,000*

ABC Group
Statement of profit or loss
For the year ended December 31, 20x1

Sales	840,000
Cost of goods sold	(490,000)
Gross profit	*350,000*
Depreciation expense	(104,000)
Distribution costs	(100,000)
Interest expense	(6,000)
Profit for the year	***140,000***
Profit attributable to:	
Owners of the parent	136,000
Non-controlling interests	4,000
	140,000

Chapter 17 – Consolidated Financial Statements (Part 2)

Multiple Choice – Computational

Answers at a glance:

1. D	6. C	11. B	16. D
2. A	7. C	12. D	17. A
3. C	8. A	13. B	18. A
4. A	9. B	14. B	19. B
5. D	10. A	15. D	20. D

Solution:

1. D

Solution:

Equipment, net – Lion Co. (800,000 x 8/10)	2,560,000
Equipment, net – Cub Co. *(fair value)* (1,280,000 x 3/5)	768,000
Consolidated equipment, net – Dec. 31, 20x2	***3,328,000***

2. A

Solution:

Dec. 31, 20x2	***Accumulated depreciation*** (320K x 2/5)	***128,000***	
	Depreciation expense (320K ÷ 5)	***0***	64,000
	Retained earnings – Lion Co.*		51,200
	Retained earnings – Cub Co.*		12,800

*These are the shares of Lion and Cub in the depreciation of the FVA in the ***prior year***, i.e., 20x1 (64,000 x 80% & 20%).

3. C

Solution:

Equipment, net – Kangaroo	2,000,000
Equipment, net – Joey	1,200,000
FVA on equipment, net - *increment* [(480,000 – 400,000) x 8/10]	64,000
Consolidated equipment, net – Dec. 31, 20x2	***3,264,000***

4. A

Solution:

Analysis of net assets

Owlet Co.	***Acquisition date***	***Consolidation date***	***Net change***

Share capital	400,000	400,000	
Retained earnings (1.12M – 800K)	320,000	1,120,000	
Totals at carrying amounts	720,000	1,520,000	
Fair value adjustments at acquisition date	-	-	
Subsequent depreciation of FVA	NIL	-	
Unrealized profits (Upstream only)	NIL	-	
Subsidiary's net assets at fair value	***720,000***	***1,520,000***	***800,000***

The fair value of NCI at acquisition date is computed as follows:
(The solution below is based on a portion of Goodwill computation Formula #2.)

Fair value of NCI	***220,000***	***(squeeze)***
NCI's proportionate share in net assets of subsidiary	(180,000)[a]	
Goodwill attributable to NCI - acquisition date (given)	*40,000*	***(start)***

[a] (₱720,000 *see above* x 25%) = ₱180,000

5. D
Solution:

Consideration transferred *(given)*	600,000
Less: Previously held equity interest in the acquiree	-
Total	600,000
Less: Parent's proportionate share in the net assets of subsidiary (₱720,000 acquisition-date fair value x 75%)	(540,000)
Goodwill attributable to owners of parent – acquisition date	*60,000*
Less: Parent's share in goodwill impairment *(₱32K x 75%)*	(24,000)
Goodwill attributable to owners of parent – current year	*36,000*
Fair value of NCI *(see Requirement 'a')*	220,000
Less: NCI's proportionate share in the net assets of subsidiary (₱720,000 acquisition-date fair value x 25%)	(180,000)
Goodwill attributable to NCI – acquisition date	*40,000*
Less: NCI's share in goodwill impairment *(₱32,000 x 25%)*	(8,000)
Goodwill attributable to NCI – current year	*32,000*
Goodwill, net – current year	***68,000***

6. C
Solution:

Subsidiary's net assets at fair value *(see above)*	1,520,000

Multiply by: NCI percentage	25%
Total	380,000
Add: Goodwill attributable to NCI *(see above)*	32,000
NCI in net assets – current year	***412,000***

7. C

Solution:

Parent's retained earnings – current year		2,000,000
Consolidation adjustments:		
Parent's share in the ***net change*** in subsidiary's net assets [(a)]	600,000	
Parent's share in goodwill impairment	(24,000)	
Net consolidation adjustments		576,000
Consolidated retained earnings		***2,576,000***

[(a)] Net change in subsidiary's net assets *(see above)* ₱800,000 x 75% = ₱600,000.

8. A

Solution:

Total assets of Parent	4,000,000
Total assets of Subsidiary	2,000,000
Investment in subsidiary *(consideration transferred)*	(600,000)
Fair value adjustments - net	-
Goodwill – net	68,000
Effect of intercompany transactions	-
Consolidated total assets	***5,468,000***

9. B

Solution:

Share capital of Parent	1,200,000
Share premium of Parent	-
Consolidated retained earnings	2,576,000
Equity attributable to owners of the parent	*3,776,000*

	412,00
Non-controlling interests	0
	4,188,00
Consolidated total equity	***0***

10. A

Solution:

Sales by Rooster Co.	4,000,000
Sales by Cockerel Co.	2,800,000
Less: Intercompany sales during the current period	(600,000)
Consolidated sales	***6,200,000***

11. B

Solution:

The unrealized profit in ending inventory is computed as follows:

Sale price of intercompany sale	600,000
Cost of intercompany sale	(480,000)
Profit from intercompany sale	120,000
Multiply by: Unsold portion as of yr.-end	1/4
Unrealized gross profit in ending inventory	*30,000*

Cost of sales of Rooster Co.	1,600,000
Cost of sales of Cockerel Co.	1,200,000
Less: Intercompany sales during the current period	(600,000)
Add: Unrealized gross profit in ending inventory	30,000
Less: Realized profit in beginning inventory	-
Add: Depreciation of FVA on inventory	-
Consolidated cost of sales	***2,230,000***

12. D

Solution:

	Rooster	***Cockerel***	***Consolidated***
Profits before adjustments	936,000	700,000	1,636,000
Consolidation adjustments:			
Unrealized profit *(Reqmt.'a')*	(30,000)	-	(30,000)
Dividend income *(given)*	(40,000)	N/A	(40,000)
Net consol. adjustments	(70,000)	-	(70,000)
Profits before FVA	*866,000*	*700,000*	1,566,000
Depreciation of FVA	-	-	-
Sh. in goodwill impairment[(b)]	(24,000)	(8,000)	(32,000)
Consolidated profit	842,000	692,000	***1,534,000***

OCI	296,000	100,000	396,000
Comprehensive income	1,138,000	792,000	***1,930,000***

[(b)] Share in goodwill impairment: (₱32,000 x 75%); (₱32,000 x 25%)

13. B *(See solution above)*

14. B

Solution:

	Owners of parent	***NCI***	***Consolidated***
Rooster's profit before FVA *(see above)*	866,000	N/A	866,000
Sh. in Cockerel's profit before FVA [(c)]			
Depreciation of FVA	-	-	-
Sh. in goodwill impairment *(see above)*	(24,000)	(8,000)	(32,000)
Profit attributable to	***1,367,000***	***167,000***	*1,534,000*
Rooster's OCI	296,000	N/A	296,000
Sh. in Cockerel's OCI [(d)]	75,000	25,000	100,000
Comprehensive inc. attributable to	***1,738,000***	***192,000***	*1,930,000*

[(c)] Share in Cockerel's profit before FVA: (₱700,000 x 75%); (₱700,000 x 25%)

[(d)] Share in Cockerel's OCI: (₱100,000 x 75%); (₱100,000 x 25%)

15. D *(See solution above)*

16. D

Solution:

The ***consolidated*** *sales* and *cost of sales* are computed as follows:

Consolidated sales	
Sales of Pig Co.	4,000,000
Sales of Piglet Co. ***from Sept. 1 to Dec. 31 only*** (₱2.88M x4/12)	960,000
Less: Intercompany sales during the year	(324,000)
Consolidated sales	***4,636,000***

17. A

Solution:

The unrealized profit in ending inventory is computed as follows:

Sale price of intercompany sale	324,000
Cost of intercompany sale (₱324,000 ÷ 150%)	(216,000)
Profit from intercompany sale	108,000

Multiply by: Unsold portion as of year-end	1/3
Unrealized gross profit	*36,000*

Cost of sales of Pig Co.	1,600,000
COS of Piglet Co. ***from Sept. 1 to Dec. 31 only*** (₱1.2M x 4/12)	400,000
Less: Intercompany sales during the year	(324,000)
Add: *Unrealized gross profit* in ending inventory	36,000
Less: Realized profit in beginning inventory	-
Add: Depreciation of FVA on inventory	-
Consolidated cost of sales	***1,712,000***

18. A
Solution:

	Parent	***Subsidiary***	***Consolidated***
Profits before adjustments	896,000	240,000[a]	1,136,000
Consolidation adjustments:			
Unrealized profit - *(see above)*	(-)	(36,000)	(36,000)
Net consolidation adjustments	(-)	(36,000)	(36,000)
Profits before FVA	*896,000*	*204,000*	1,100,000
Depreciation of FVA	(-)	(-)	(-)
Consolidated profit	896,000	204,000	***1,100,000***

[a] (₱720,000 x 4/12 = ₱240,000)

19. B
Solution:

	Owners of parent	***NCI***	***Consolidated***
Pig's profit before FVA *(see above)*	896,000	N/A	896,000
Share in Piglet's profit before FVA [(c)]	153,000	51,000	204,000
Depreciation of FVA	(-)	(-)	(-)
Share in goodwill impairment	(-)	(-)	(-)
Totals	***1,049,000***	***51,000***	*1,100,000*

[(c)] Shares in Piglet's profit before FVA (*see above*): (₱204K x 75%); (₱204K x 25%)

20. D

Solution:

Profit or loss attributable to owners of parent and NCI

	Owners of parent	***NCI***	***Consoli-dated***
Bear's profit before FVA *(given)*	936,000	N/A	936,000
Share in Cub's profit before FVA [(a)]	489,000	163,000	652,000
Profit attributable to preference shareholders of Cub [(b)]	N/A	***48,000***	48,000
Depreciation of FVA	-	-	-
Share in impairment loss on goodwill	-	-	-
Totals	***1,424,960***	***211,000***	***1,636,000***

[(a)] The shares in Cub's profit are computed as follows:

Profit of Cub. Co.	700,000
One-year dividends on cumulative preference sh. (400K x 12%)	(48,000)[(b)]
Profit of Cub Co. attributable to ***ordinary shareholders***	*652,000*
Allocation:	
Bear's share (₱652,000 x 75%)	489,000
NCI's share (₱652,000 x 25%)	163,000
As allocated:	*652,000*

NOTE: Answer choice is ***rounded-off***.

Chapter 18 – Consolidated Financial Statements (Part 3)

Multiple Choice – Theory

1. B
2. A
3. C
4. A

Multiple Choice – Computational

Answers at a glance:

1. D	11. B	21. A	31. C	41. C
2. A	12. C	22. D	32. B	42. A
3. C	13. A	23. A	33. A	43. A
4. D	14. D	24. B	34. B	44. C
5. C	15. A	25. C	35. B	45. A
6. D	16. B	26. B	36. D	46. D
7. D	17. B	27. D	37. A	47. D
8. D	18. D	28. A	38. C	48. B
9. A	19. C	29. B	39. A	49. C
10. B	20. B	30. D	40. D	50. A
				51. B
				52. A
				53. C

Solutions:

1. D

Solutions:

Step 1: **Analysis of effects of intercompany transaction**

There are no intercompany transactions in the problem.

Step 2: **Analysis of net assets**

XYZ, Inc.	***Acquisition date***	***Consolidation date***	***Net change***
Total equity at carrying amounts	296,000	376,000	
Fair value adjustments at acquisition date	64,000	64,000	
Subsequent depreciation of FVA	NIL	(40,000)*	
Unrealized profits (Upstream only)	NIL	-	

Subsidiary's net assets at fair value	***360,000***	***400,000***	***40,000***

* ₱32,000 dep'n. of FVA on inventory + ₱8,000 [(₱40,000 - ₱8,000) ÷ 4 yrs.] dep'n. of FVA on equipment = *₱40,000*

Step 3: **Goodwill computation**

Case #1: Formula #1 - NCI measured at proportionate share

Consideration transferred (5,000 sh. x ₱60)	300,000
Non-controlling interest in the acquiree (360K x20%) -*(Step 2)*	72,000
Previously held equity interest in the acquiree	-
Total	*372,000*
Fair value of net identifiable assets acquired *(Step 2)*	(360,000)
Goodwill at acquisition date	*12,000*
Accumulated ***impairment losses*** since acquisition date	(4,000)
Goodwill, net – Dec. 31, 20x1	***8,000***

Step 4: **Non-controlling interest in net assets**

	Case #1
XYZ's net assets at fair value – Dec. 31, 20x1 *(Step 2)*	400,000
Multiply by: NCI percentage	20%
Total	80,000
Add: Goodwill attributable to NCI – Dec. 31, 20x1 *(Step 3)*	-
Non-controlling interest in net assets – Dec. 31, 20x1	***80,000***

Step 5: **Consolidated retained earnings**

	Case #1
ABC's retained earnings – Dec. 31, 20x1	440,000
Consolidation adjustments:	
ABC's share in the ***net change*** in XYZ's net assets *(a)*	32,000
Unrealized profits (Downstream only)	-
Gain on extinguishment of bonds	-
Impairment loss on goodwill attributable to parent *(Step 3)*	(4,000)
Net consolidation adjustments	28,000
Consolidated retained earnings – Dec. 31, 20x1	***468,000***

(a) Net change in XYZ's net assets *(Step 2)* of ₱40,000 x 80% = ₱32,000.

Step 6: **Consolidated profit or loss**

Case #1	*Parent*	*Subsidiary*	*Consolidated*
Profits before adjustments	240,000	80,000	320,000
Consolidation adjustments:			
Unrealized profits	-	-	-
Dividend income from subsidiary	-	N/A	-
Gain or loss on extinguishment of bonds	-	-	-
Net consolidation adjustments	-	-	-
Profits before FVA	*240,000*	*80,000*	320,000
Depreciation of FVA [(c)]	(32,000)	(8,000)	(40,000)
Goodwill impairment *(Step 3)*	***(4,000)***	**-**	(4,000)
Consolidated profit	204,000	72,000	***276,000***

[(c)] Shares in the depreciation of FVA: (40,000 x 80%); (40,000 x 20%)

***Step 7:* Profit or loss attributable to owners of parent and NCI**

Case #1	*Owners of parent*	*NCI*	*Consolidated*
ABC's profit before FVA *(Step 6)*	240,000	N/A	240,000
Share in XYZ's profit before FVA [(d)]	64,000	16,000	80,000
Depreciation of FVA *(Step 6)*	(32,000)	(8,000)	(40,000)
Share in goodwill impairment *(Step 3)*	***(4,000)***	**-**	(4,000)
Totals	***268,000***	***8,000***	*276,000*

[(d)] Shares in XYZ's profit before FVA (*Step 6*) – (80,000 x 80%); (80,000 x 20%)

2. A

Solution:

	Case #1 (proportionate)
Total assets of ABC Co.	1,672,000
Total assets of XYZ, Inc.	496,000
Investment in subsidiary	(300,000)
FVA, net (16K - 10K) ***(Step 2)***	24,000
Goodwill, net ***(Step 3)***	***8,000***
Effect of intercompany transaction	-
Consolidated total assets	***1,900,000***

3. C

Solution:

	Case #1 (proportionate)
Share capital of ABC Co.	680,000
Share premium of ABC Co.	260,000
Consolidated retained earnings ***(Step 5)***	468,000
Equity attributable to owners of the parent	*1,408,000*
Non-controlling interests ***(Step 4)***	80,000
Consolidated total equity	***1,488,000***

4. D

Solution:

Step 1: **Analysis of effects of intercompany transaction**

There are no intercompany transactions in the problem.

Step 2: **Analysis of net assets**

XYZ, Inc.	***Acquisition date***	***Consolidation date***	***Net change***
Total equity at carrying amounts	296,000	376,000	
Fair value adjustments at acquisition date	64,000	64,000	
Subsequent depreciation of FVA	NIL	(40,000)*	
Unrealized profits (Upstream only)	NIL	-	
Subsidiary's net assets at fair value	***360,000***	***400,000***	***40,000***

* ₱32,000 dep'n. of FVA on inventory + ₱8,000 [(₱40,000 - ₱8,000) ÷ 4 yrs.] dep'n. of FVA on equipment = ***₱40,000***

Step 3: **Goodwill computation**

Case #2: Formula #2 - NCI measured at fair value

Consideration transferred (5,000 sh. x ₱60)	300,000
Less: Previously held equity interest in the acquiree	-
Total	300,000
Less: Parent's proportionate share in the net assets of subsidiary (₱90,000 acquisition-date fair value x 80%)	(288,000)
Goodwill attributable to owners of parent – Jan. 1, 20x1	*12,000*
Less: Parent's share in goodwill impairment *(₱4,000 x 80%)*	(3,200)
Goodwill attributable to owners of parent – Dec. 31, 20x1	***8,800***
Fair value of NCI *(see given)*	75,000
Less: NCI's proportionate share in the net assets of subsidiary (₱360,000 acquisition-date fair value x 20%)	(72,000)

Goodwill attributable to NCI – Jan. 1, 20x1	*3,000*
Less: NCI's share in goodwill impairment *(₱4,000 x 20%)*	(800)
Goodwill attributable to NCI – Dec. 31, 20x1	***2,200***
	-
Goodwill, net – Dec. 31, 20x1	***11,000***

Step 4: **Non-controlling interest in net assets**

	Case #2
XYZ's net assets at fair value – Dec. 31, 20x1 *(Step 2)*	400,000
Multiply by: NCI percentage	20%
Total	80,000
Add: Goodwill attributable to NCI – Dec. 31, 20x1 *(Step 3)*	2,200
Non-controlling interest in net assets – Dec. 31, 20x1	***82,200***

Step 5: **Consolidated retained earnings**

	Case #2
ABC's retained earnings – Dec. 31, 20x1	440,000
Consolidation adjustments:	
ABC's share in the ***net change*** in XYZ's net assets [(a)]	32,000
Unrealized profits (Downstream only)	-
Gain on extinguishment of bonds	-
Impairment loss on goodwill attributable to parent *(Step 3)* [(b)]	(3,200)
Net consolidation adjustments	28,800
Consolidated retained earnings – Dec. 31, 20x1	***468,800***

[(a)] Net change in XYZ's net assets *(Step 2)* of ₱40,000 x 80% = ₱32,000.

[(b)] Again, goodwill impairment is attributed ***only to the parent*** if NCI is measured at *proportionate share (Case #1)* while it is ***shared*** between the parent and NCI if NCI is measured at *fair value (Case #2)*.

Step 6: **Consolidated profit or loss**

Case #2	***Parent***	***Subsidiary***	***Consolidated***

Profits before adjustments	240,000	80,000	320,000
Consolidation adjustments:			
Unrealized profits	-	-	-
Dividend income from subsidiary	-	N/A	-
Gain or loss on extinguishment of bonds	-	-	-
Net consolidation adjustments	-	-	-
Profits before FVA	*240,000*	*80,000*	320,000
Depreciation of FVA	(32,000)	(8,000)	(40,000)
Goodwill impairment *(Step 3)*	***(3,200)***	***(800)***	(4,000)
Consolidated profit	204,800	71,200	***276,000***

5. C

Solution:

	Case #2 (fair value)
Total assets of ABC Co.	1,672,000
Total assets of XYZ, Inc.	496,000
Investment in subsidiary	(300,000)
FVA, net (16K - 10K) ***(Step 2)***	24,000
Goodwill, net ***(Step 3)***	***11,000***
Effect of intercompany transaction	-
Consolidated total assets	***1,903,000***

6. D

Solution:

	Case #2 (fair value)
Share capital of ABC Co.	680,000
Share premium of ABC Co.	260,000
Consolidated retained earnings ***(Step 5)***	468,800
Equity attributable to owners of the parent	*1,408,800*
Non-controlling interests ***(Step 4)***	82,200
Consolidated total equity	***1,491,000***

7. D ***None***. The transaction is accounted for as ***equity transaction*** because it does ***not*** result to loss of control.

8. D ***None***. The transaction is accounted for as ***equity transaction*** because it does ***not*** result to loss of control.

9. A

Solution:

	%	***Owners of parent***	*%*	***NCI***	***Net assets of XYZ***
Before the transaction	80%	320,000	20 %	80,000	400,000 [a]
After the transaction	100 %	400,000	-	-	400,000
Change – Inc./ (Decrease)		*80,000*		*(80,000)*	***-***

[a] This represents the fair value of XYZ's net assets on December 31, 20x1 (₱360,000 fair value on acquisition date + ₱40,000 increase during the year).

Jan. 1, 20x2	NCI *(the decrease computed above)*	80,000	
	Retained earnings – ABC Co.		
	(squeeze)	***40,000***	120,000
	Investment in subsidiary	***0***	

10. B

Solution:

	%	***Owners of parent***	*%*	***NCI***	***Net assets of XYZ***
Before the transaction	80%	332,000	20%	83,000	415,000 [b]
After the transaction	100%	415,000	-	-	415,000
Change – Inc./ (Decrease)		*83,000*		*(83,000)*	***-***

[b] When NCI is measured at ***fair value***, the subsidiary's net assets is ***grossed up*** to reflect the goodwill attributable to the NCI (₱83,000 NCI ÷ 20% = ₱415,000).

Jan. 1, 20x2	NCI *(the decrease computed above)*	83,000	
	Retained earnings – ABC Co.		
	(squeeze)	***37,000***	120,000
	Investment in subsidiary	***0***	

11. B

Solution:

	%	*Owners of parent*	%	*NCI*	*Net assets of XYZ*
Before the transaction	80 %	320,000	20%	80,000	400,000
After the transaction	92 %	368,000	8%	32,000	400,000
Change – Inc./ (Decrease)		*48,000*		*(48,000)*	**-**

The ***direct adjustment in equity*** is determined as follows:

	Case #1 (proportionate)
Fair value of consideration	80,000
Change in NCI *(see table above)*	(48,000)
Direct adjustment to equity	***32,000***

12. C
Solution:

	%	*Owners of parent*	%	*NCI*	*Net assets of XYZ*
Before the transaction	80%	332,000	20%	83,000	415,000*
After the transaction	92%	381,800	8%	33,200	415,000
Change – Inc./ (Decrease)		*49,800*		*(49,800)*	**-**

*The net assets is grossed up as follows (₱20,750 NCI ÷ 20% = ₱103,750).

	Case #2 (fair value)
Fair value of consideration	80,000
Change in NCI *(see table above)*	(49,800)
Direct adjustment to equity	***30,200***

13. A
Solution:

	%	*Owners of parent*	%	*NCI*	*Net assets of XYZ*
Before the transaction	80%	320,000	20%	80,000	400,000
After the transaction	70%	280,000	30%	120,00	400,000

		0	
Change – Inc./ (Decrease)	*(40,000)*	*40,000*	**-**

	Case #1 (proportionate)
Fair value of consideration	80,000
Change in NCI *(see table above)*	(40,000)
Direct adjustment to equity	***40,000***

14. D
Solution:

	%	***Owners of parent***	*%*	***NCI***	***Net assets of XYZ***
Before the transaction	80%	332,000	20%	83,000	415,000
After the transaction	70%	290,500	30%	124,500	415,000
Change – Inc./ (Decrease)		*(41,500)*		*41,500*	**-**

*The net assets is grossed up as follows: (₱83,000 NCI ÷ 20% = ₱415,000).

	Case #2 (fair value)
Fair value of consideration	80,000
Change in NCI *(see table above)*	(41,500)
Direct adjustment to equity	***38,500***

15. A
Solution:
The change in ABC's ownership interest in XYZ is determined as follows:

	Before issuance	*%*	***After issuance***	*%*
Shares held by ABC	40,000	80%	40,000	***66.67%***
Outstanding shares of XYZ	50,000		***60,000*** [a]	

[a] (50,000 + 10,000 additional shares issued to NCI = 60,000)

	%	***Owners of parent***	*%*	***NCI***	***Net assets of XYZ***
Before the transaction	80%	320,000	20%	80,000	400,000
After the transaction	66.67%	333,33	33.33%	166,66	500,000

	2	8	[b]
Change – Inc./ (Decrease)	*13,332*	*86,668*	*100,000*

[b] 100,000 + 25,000 proceeds from issuance of additional shares.

The ***direct adjustment in equity*** is determined as follows:

	Case #1 (proportionate)
Fair value of consideration	100,000
Change in NCI *(see table above)*	(86,668)
Direct adjustment to equity	***13,332***

16. B

Solution:

	%	***Owners of parent***	*%*	***NCI***	***Net assets of XYZ***
Before the transaction	80%	332,000	20%	83,000	415,000 [c]
After the transaction	66.67%	343,332	33.33%	171,668	515,000 [d]
Change – Inc./ (Decrease)		*11,332*		*88,668*	*100,000*

[c] The net assets is grossed up as follows: (₱83,000 NCI ÷ 20% = ₱415,000).

[d] (₱415,000 + ₱100,000 proceeds from issuance of additional shares = ₱515,000).

The ***direct adjustment in equity*** is determined as follows:

	Case #2 (fair value)
Fair value of consideration	100,000
Change in NCI *(see tables above)*	(88,668)
Direct adjustment to equity	***11,332***

17. B

Solution:

Step 1: We will identify the ***carrying amounts*** of XYZ's assets and liabilities in the consolidated financial statements as at the date control was lost.

Statements of financial position
As at January 1, 20x2

	ABC Co.	XYZ, Inc.	*Consoli -dated*	*Carrying amount of XYZ's net assets*
ASSETS	*(a)*		*(b)*	*(c) = (b) – (a)*
Cash	92,000	228,000	320,000	228,000
Accounts receivable	300,000	88,000	388,000	88,000
Inventory	420,000	60,000	480,000	60,000
Investment in subsidiary	300,000	-	-	
Equipment	800,000	200,000	1,040,000	240,000
Accumulated depreciation	(240,000)	(80,000)	(336,000)	(96,000)
Goodwill	-	-	12,000	
TOTAL ASSETS	*1,672,000*	*496,000*	***1,904,000***	***520,000***
LIABILITIES AND EQUITY				
Accounts payable	172,000	120,000	292,000	120,000
Bonds payable	120,000	-	120,000	-
Total liabilities	*292,000*	*120,000*	*412,000*	***120,000***
Share capital	680,000	200,000	680,000	
Share premium	260,000	-	260,000	-
Retained earnings	440,000	176,000	472,000	-
Non-controlling interest	-	-	80,000	-
Total equity	*1,380,000*	*376,000*	*1,492,000*	***400,000***
TOTAL LIAB. & EQTY.	*1,672,000*	*496,000*	***1,904,000***	***-***

The consolidated retained earnings pertains to the ***parent only***. Thus, no retained earnings is allocated to XYZ.

Step 2: We will prepare the ***deconsolidation journal entries (DJE)***:

DJE #1: *To recognize the gain or loss on the disposal of controlling interest.*

Jan. 1, 20x2	Cash – ABC Co. *(Consideration received)*	400,000	
	Investment in associate *(Investment retained)*	0	
	Accounts payable – XYZ, Inc.	100,000	
	Accumulated depreciation – XYZ, Inc.	0	

	Non-controlling interest	120,00	
	Cash – XYZ, Inc.	0	228,00
	Accounts receivable – XYZ, Inc.	96,000	0
	Inventory – XYZ, Inc.	80,000	88,000
	Equipment – XYZ, Inc.		60,000
	Goodwill		240,00
	Gain on disposal *(squeeze)*		0
			12,000
			168,00
			0

18. D

Solution:

Jan. 1, 20x2	Cash – ABC Co. *(Consideration received)*	400,00	
	Held for trading securities *(Investment retained)*	0 100,00	
	Non-controlling interest	0	412,00
	Net identifiable assets [a] *(see given)*	82,400	0
	Goodwill		12,000
	Gain on disposal *(squeeze)*		***158,40***
			0

[a] Net identifiable assets is also *excess* of total assets over total liabilities.

19. C

Solution:

Total assets of Dad before the combination	4,000,000
Investment in subsidiary	1,000,000
Total assets of Dad after the combination	***5,000,000***

20. B

Solution:

Total assets of Dad ***after*** the combination *(see above)*	5,000,000
Total assets of Son *(carrying amount)*	1,600,000
Investment in subsidiary	(1,000,000)
FVA on assets (430K fair value – 400K carrying amount)	120,000
Goodwill – net [1M + (920K x 20% NCI)] – 920	264,000
Effect of intercompany transactions *(intercompany receivable)*	(80,000)
Consolidated total assets	***5,904,000***

21. A

Solution:

Analysis of net assets

Nymph Co.	***Acquisitio***	***Consolidatio***	***Net***

	n date	*n date*	*change*
Share capital (100,000 sh. x ₱4)	400,000	400,000	
Retained earnings	320,000	1,120,000	
Totals at carrying amounts	720,000	1,520,000	
FVA on investment property [a]	80,000	560,000	
FVA on building	120,000	120,000	
Subsequent depreciation of FVA [b]	NIL	(48,000)	
Subsidiary's net assets at fair value	*920,000*	*2,152,000*	*1,232,000*

[a] FVA on acquisition date (₱800,000 - ₱720,000 = ₱80,000); FVA on June 30, 20x3 (₱1,280,000 - ₱720,000 = ₱560,000). These FVA's are ***not*** subsequently depreciated because depreciation is ***prohibited*** under the fair value model.

[b] The depreciation of FVA pertains only to the building *(see discussion above)* (₱120,000 x 2/5 = ₱48,000).

Goodwill at current year
Formula #2:

Consideration transferred (75,000 sh. x **₱16**)	1,200,000
Less: Previously held equity interest in the acquiree	-
Total	1,200,000
Less: Parent's proportionate share in the net assets of subsidiary (₱920,000 acquisition-date fair value x 75%)	(690,000)
Goodwill attributable to owners of parent – acquisition date	*510,000*
Less: Parent's share in goodwill impairment *(₱80,000 x 75%)*	(60,000)
Goodwill attributable to owners of parent – current year	*450,000*
Fair value of NCI (25,000 sh. x **₱14**)	350,000
Less: NCI's proportionate share in the net assets of subsidiary (₱920,000 acquisition-date fair value x 25%)	(230,000)
Goodwill attributable to NCI – acquisition date	*120,000*
Less: NCI's share in goodwill impairment *(₱80,000 x 25%)*	(20,000)
Goodwill attributable to NCI – current year	*100,000*
Goodwill, net – current year	***550,000***

22. D
Solution:

Nymph's net assets at fair value – 6/30/x3 *(see 'Analysis' above)*	2,152,000
Multiply by: NCI percentage	25%
Total	538,000
Add: Goodwill attributable to NCI – 6/30/x3 *(see above)*	100,000

Non-controlling interest in net assets – June 30, 20x3		***638,000***

23. A

Solution:

Cockroach's retained earnings – 6/30/x3		2,000,000
Consolidation adjustments:		
Share in the ***net change*** in Nymph's net assets [(a)]	924,000	
Cockroach's share in goodwill impairment	(60,000)	
Net consolidation adjustments		864,000
Consolidated retained earnings – June 30, 20x3		***2,864,000***

[(a)] Net change in Nymph's net assets *(see 'Analysis')* ₱1,232,000 x 75% = ₱924,000.

24. B

Solution:

Total assets of Cockroach	4,000,000
Total assets of Nymph	2,000,000
Investment in subsidiary	(1,200,000)
Fair value adjustments – net (560K + 120K – 48K) *see 'Analysis'*	632,000
Goodwill – net	550,000
Effect of intercompany transactions *(Intercompany receivable)*	(40,000)
Consolidated total assets	***5,942,000***

25. C

Solution:

Share capital of Cockroach	1,200,000
Share premium of Cockroach	-
Consolidated retained earnings	2,864,000
Equity attributable to owners of the parent	*4,064,000*
Non-controlling interests	638,000
Consolidated total equity	***4,702,000***

26. B

Solution:

Analysis of net assets

Bunny Co.	***Acquisition date*** *(Jan. 1, 20x3)*	***Consolidation date*** *(Dec. 31, 20x3)*	***Net change***
Share capital	400,000	400,000	
Retained earnings	320,000	1,120,000	
Totals at carrying amounts	720,000	1,520,000	
Fair value adjustments	-	-	
Subsequent depreciation of FVA	NIL	(-)	
Subsidiary's net assets at fair value	***720,000***	***1,520,000***	***800,000***

Goodwill at current year	
Formula #2:	
Consideration transferred	800,000
Less: Previously held equity interest in the acquiree	400,000
Total	1,200,000
Less: Parent's proportionate share in the net assets of subsidiary (₱720,000 acquisition-date fair value x 75%*)	(540,00)
Goodwill attributable to owners of parent – Jan. 1, 20x3	*660,000*
Less: Parent's share in goodwill impairment	(-)
Goodwill attributable to owners of parent – Dec. 31, 20x3	*660,000*
Fair value of NCI	220,000
Less: NCI's proportionate share in the net assets of subsidiary (₱720,000 acquisition-date fair value x 25%)	(180,000)
Goodwill attributable to NCI – Jan. 1, 20x3	*40,000*
Less: NCI's share in goodwill impairment	(-)
Goodwill attributable to NCI – Dec. 31, 20x3	*40,000*
Goodwill, net – Dec. 31, 20x3	***700,000***

* (40% previous interest + 35% additional interest acquired on Jan. 1, 20x3)

27. D

Solution:

Bunny's net assets at fair value – 12/31/x3 *(see 'Analysis' above)*	1,520,000
Multiply by: NCI percentage	25%
Total	380,000
Add: Goodwill attributable to NCI – 6/30/x3 *(see above)*	40,000
Non-controlling interest in net assets – Dec. 31, 20x3	***420,000***

28. A

Solution:

Rabbit's retained earnings – 12/31/x3		2,000,000
Consolidation adjustments:		
Rabbit's share in the ***net change*** in Bunny's net assets [(a)]	600,000	
Rabbit's share in goodwill impairment	(-)	
Net consolidation adjustments		600,000
Consolidated retained earnings – Dec. 31, 20x3		***2,600,000***

[(a)] Net change in Bunny's net assets *(see 'Analysis')* ₱800,000 x 75% = ₱600,000.

29. B

Solution:

Total assets of Rabbit	4,000,000
Total assets of Bunny	2,000,000
Investment in subsidiary (₱800,000 + ₱400,000)	(1,200,000)
Fair value adjustments – net	-
Goodwill – net	700,000
Effect of intercompany transactions	-
Consolidated total assets	***5,500,000***

30. D

Solution:

Share capital of Rabbit	1,200,000
Share premium of Rabbit	-
Consolidated retained earnings	2,600,000
Equity attributable to owners of the parent	*3,800,000*
Non-controlling interest	420,000
Consolidated total equity	***4,220,000***

31. C

Solution:

	Owners of parent	***NCI***	
Sheep's profit before FVA	866,000	N/A	
Share in Lamb's profit before FVA	525,000 [b]	*175,000*	***squeeze***
Depreciation of FVA	(-)	(-)	
Share in impairment of goodwill	(24,000)	(8,000) [a]	
Totals	*1,367,000*	167,000	***start***

[a] Shares in impairment of goodwill: (₱8,000 x 75%); (₱8,000 x 25%)
[b] (₱175,000 ÷ 25%) = ***₱700,000 Lamb's separate profit*** x 75% = ₱525,000.

32. B (1,367,000 + 167,000 *'see computations above'*) = ***1,534,000***

33. A *(See solution above)*

34. B *(See Step 1.ii below)*
Solutions:
Step 1: **Analysis of effects of intercompany transaction**
The following are the intercompany transactions during the period:

i. In-transit item (Transaction 'a')
ii. Intercompany sale of inventory (Transactions 'b' and 'c')
iii. Intercompany sale of equipment (Transaction 'd')
iv. Intercompany bond transaction (Transactions 'e')
v. Intercompany dividend transaction (Transactions 'f')

i. *In-transit item*
The ₱4,000 check deposited to Peter's account is a valid payment for Simon's account. Therefore, Simon's ₱8,000 account payable to Peter need ***not*** be adjusted.

However, since Peter failed to record the payment, Peter's ₱12,000 accounts receivable from Simon must be adjusted. As to Peter, the deposit is a bank *credit memo*.

The ***adjusting journal entry (AJE)*** in Peter's books is as follows:

Dec. 31, 20x1	Cash in bank	4,000	
	Accounts receivable		4,000

Unlike CJE's, AJE's are recorded in the separate books. The remaining balance of ***₱8,000*** in the intercompany account receivable/account payable shall be ***eliminated*** through CJE.

Summary of effects on the consolidated financial statements:
- Cash: ***increased*** by ₱4,000.
- Accounts receivable: ***decreased*** by ₱12,000 (₱3,000 AJE + ₱8,000 CJE).
- Accounts payable: ***decreased*** by ₱8,000

ii. *Intercompany sale of inventory*
Transaction (b) is ***downstream*** while transaction (c) is ***upstream***. The ***unrealized profits*** in ending inventory are determined as follows:

	Downstream	***Upstream***	***Total***
Sale price of intercompany sale	128,000	60,000	
Cost of intercompany sale	(80,000)	(40,000)	
Profit from intercompany sale	48,000	20,000	
Multiply by: Unsold portion as of yr.-end	1/3	1/2	
Unrealized gross profit	***16,000***	***10,000***	***26,000***

The related consolidated accounts are computed as follows:

Ending inventory of Peter Co.	440,000
Ending inventory of Simon Co.	268,000
Less: Unrealized profit in ending inventory	(26,000)
Consolidated ending inventory	***682,000***

Sales by Peter Co.	3,728,000
Sales by Simon Co.	1,020,000
Less: Intercompany sales during 20x1 (128,000 + 60,000)	(188,000)
Consolidated sales	***4,560,000***

Before we can compute for the consolidated *cost of sales*, we need to determine first the ***depreciation of FVA*** in 20x1.

FVA on inventory	24,000
FVA on equipment, net (20,000 ÷ 5 years)	16,000
FVA on patent (20,000 ÷ 8 years)	10,000
Depreciation of FVA in 20x1	*50,000*

The consolidated *cost of sales* is computed as follows:

Cost of sales of Peter Co.	1,700,000
Cost of sales of Simon Co.	472,000
Less: Intercompany sales during 20x1	(188,000)
Add: Unrealized profit in ending inventory	26,000
Add: Depreciation of FVA on inventory *(see computation above)*	24,000
Consolidated cost of sales	***2,034,000***

iii. *Intercompany sale of property, plant and equipment*

Transaction (d) is ***upstream***. The effects of this transaction are analyzed as follows:

a) Unamortized balance of deferred gain (loss) on December 31, 20x1:

Sale price	20,000
Carrying amount of equipment on Jan. 1, 20x1	(24,000)
Loss on sale of equipment – Jan. 1, 20x1	*(4,000)*
Multiply by: Ratio of useful life at beg. and end of yr.	4/5

Unamortized balance of deferred loss – Dec. 31, 20x1	***(3,200)***

b) Effect on the 20x1 depreciation:

Because of the sale	***Had there been no sale***	***Effect on combined FS***
Peter recognized depreciation of ₱4,000 in 20x1 (₱20,000 purchase price ÷ 5 yrs.).	Simon should have recognized depreciation of ₱4,800 in 20x1 (₱24,000 carrying amount ÷ 5 yrs.).	Depreciation is ***understated by ₱800***.

The related consolidated accounts are computed as follows:

Equipment, net – Parent	2,576,000
Equipment, net – Subsidiary	108,800
Unamortized balance of deferred loss*	3,200
FVA on equipment, net (80,000 beg. - 16,000 dep'n of FVA)	64,000
Consolidated equipment – net	***2,752,000***

*The *deferred loss* is ***added*** because both "loss" and "equipment" have a normal *debit* balance. *Debit* and *debit* results to *addition*.

Depreciation – Peter	644,000
Depreciation – Simon	27,200
Understatement in depreciation	800
Depreciation of FVA on equipment *(see computation above*	16,000
Consolidated depreciation	***688,000***

The ₱4,000 *loss on sale* recognized by Simon shall be ***eliminated*** in the consolidated statement of profit or loss.

We need to recognize also the ***unrecorded*** patent *net* of accumulated amortization.

Patent (unrecognized) *(see given)*	80,000
Less: ***Amortization of FVA on patent*** *(see computation above)*	(10,000)
Consolidated patent – net	***70,000***

A patent ***amortization expense*** of ***₱10,000*** shall be recognized in the consolidated financial statements

iv. *Intercompany bond transaction*
The effects Transaction (e) are analyzed as follows:

a) Gain or loss on extinguishment of bonds:

Carrying amount of bonds payable acquired (400,000 x 50%)	200,000
Acquisition cost of bonds *(assumed retirement price)*	(240,000)
Loss on extinguishment of bonds	***(40,000)***

b) Intercompany interest expense and interest income:

Peter paid Simon interest of ₱10,000 (400K x 50% x 10% x 6/12). However, Simon's interest income is only ₱8,000 *(see Statement of profit or loss above)*. The ₱2,000 difference must be an amortization of the premium on the investment in bonds. Nonetheless, both Peter's interest expense of ₱10,000 and Simon's interest income of ₱8,000 shall be ***eliminated*** in the consolidated financial statements together with the related bonds payable and investment in bonds.

Summary of effects on the consolidated financial statements:

- Loss on extinguishment of bonds: ***recognize*** ₱40,000.
- Interest expense: ***decreased*** by ₱10,000.
- Interest income: ***eliminated***
- Investment in bonds: ***eliminated***
- Bonds payable: ***decreased*** by ₱200,000

v. *Intercompany dividend transaction – Transaction (f)*

The dividends ***declared by Simon*** are allocated as follows:

Total dividends declared	₱80,000	
Allocation:		
Owners of the parent (80,000 x 90%)		72,000
Non-controlling interest (80,000 x 10%)		8,000
As allocated		***₱80,000***

Peter's ₱72,000 dividend income shall be ***eliminated*** in the consolidated financial statements.

No consolidation adjustment is needed for the dividends ***declared by Peter*** because the dividends pertain solely to the owners of the parent.

Step 2: **Analysis of net assets**

Simon Co.	***Acquisition date***	***Consolidation date***	***Net change***
Net assets at carrying amounts	336,000	636,800	
Fair value adjustments at acquisition date	184,000	184,000	
Subsequent depreciation of FVA [a]	NIL	(50,000)	
Unrealized profit (Upstream) - *(Step 1.ii)*	NIL	***(10,000)***	
Unamortized def. loss (Upstream) - *(Step 1.ii)*		***3,200***	
Interest income *(Step 1.iv)*		***(8,000)***	

Subsidiary's net assets at fair value	***520,000***	***756,000***	***236,000***

[a] See computation in *Step 1.ii*.

The *unrealized profit on upstream sale on inventory*, *unamortized deferred loss on upstream sale of equipment* and *interest income on investment in bonds* were closed to Simon's retained earnings by year-end. These are ***eliminated*** through addition or subtraction, as appropriate.

Step 3: **Goodwill computation**

We will use ***'Formula #2'*** because NCI is measured at ***fair value***.

Consideration transferred *(see given)*	488,000
Previously held equity interest in the acquiree	-
Total	488,000
Less: Parent's proportionate share in the net assets of subsidiary (₱520,000 acquisition-date fair value x 90%)	(468,000)
Goodwill attributable to owners of parent – Jan. 1, 20x1	*20,000*
Less: Parent's share in goodwill impairment ***(₱8,000 x 90%)*** [c]	(7,200)
Goodwill attributable to owners of parent – Dec. 31, 20x1	***12,800***
Fair value of NCI *(see given)*	60,000
Less: NCI's proportionate share in the net assets of subsidiary (₱520,000 acquisition-date fair value x 20%)	(52,000)
Goodwill attributable to NCI – Jan. 1, 20x1	*8,000*
Less: NCI's share in goodwill impairment ***(₱8,000 x 10%)*** [c]	(800)
Goodwill attributable to NCI – Dec. 31, 20x1	***7,200***
Goodwill, net – Dec. 31, 20x1	***20,000***

[c] The problem states that goodwill was impaired by ₱8,000. The impairment is ***shared*** between the parent and NCI because NCI is measured at fair value.

Step 4: **Non-controlling interest in net assets**

Simon's net assets at fair value – Dec. 31, 20x1 *(Step 2)*	756,000
Multiply by: NCI percentage	10%
Total	75,600
Add: Goodwill to NCI net of accumulated impairment *(Step 3)*	7,200
Non-controlling interest in net assets – Dec. 31, 20x1	***82,800***

Step 5: **Consolidated retained earnings**

Peter's retained earnings – Dec. 31, 20x1		1,780,000
Consolidation adjustments:		
Peter's share in the ***net change*** in Simon's net assets [(a)]	212,400	
Unrealized profits (Downstream only) - *(Step 1.ii)*	(16,000)	
Loss on extinguishment of bonds - *(Step 1.iv)*	(40,000)	
Intercompany interest expense - *(Step 1.iv)*	10,000	
Peter's share in goodwill impairment - *(Step 3)*	(7,200)	
Net consolidation adjustments		159,200
Consolidated retained earnings – Dec. 31, 20x1		***1,939,200***

[(a)] Net change in Simon's net assets *(Step 2)* of ₱236,000 x 90% = ₱212,400.

The deferred loss on the sale of equipment is ***not*** included in the computations above because the sale is ***upstream***.

Step 6: **Consolidated profit or loss**

	Parent	***Subsidiary***	***Consolidated***
Profits before adjustments	1,160,000	380,800	1,540,800
Consolidation adjustments:			
Unrealized profits - *(Step 1.ii)*	(16,000)	(10,000)	(26,000)
Unamortized def. loss - *(Step 1.iii)*		3,200	3,200
Loss on bonds - *(Step 1.iv)*	(40,000)	-	(40,000)
Interest exp./income - *(Step 1.iv)*	10,000	(8,000)	2,000
Dividend income - *(Step 1.v)*	(72,000)	N/A	(72,000)
Net consolidation adjustments	(118,000)	(14,800)	(132,800)
Profits before FVA	*1,042,000*	*366,000*	1,408,000
Depreciation of FVA [(b)]	(45,000)	(5,000)	(50,000)
Impairment of goodwill - *(Step 3)*	(7,200)	(800)	(8,000)
Consolidated profit	989,800	360,200	***1,350,000***

[(b)] Shares in the depreciation of FVA: (50,000 x 90%); (50,000 x 10%)

Step 7: **Profit or loss attributable to owners of parent and NCI**

	Owners of parent	***NCI***	***Consolidated***
Peter's profit before FVA - *(Step 6)*	1,042,000	N/A	1,042,000

Share in Simon's profit before FVA [(c)]	329,400	36,600	366,000
Depreciation of FVA - *(Step 6)*	(45,000)	(5,000)	(50,000)
Impairment of goodwill - *(Step 6)*	(7,200)	(800)	(8,000)
Totals	***1,319,200***	***30,800***	*1,350,000*

[(c)] Shares in Simon's profit before FVA (*Step 6*): (366,000 x 90%); (366,000 x 10%)

The consolidated financial statements are prepared as follows:

Peter Group
Consolidated statement of financial position
As of December 31, 20x1

ASSETS	
Cash (1,448,000 + 85,200 + ***4,000 Step 1.i)***	1,537,200
Accounts receivable (712,000 + 20,000 - ***12,000 Step 1.i)***	720,000
Inventory ***(Step 1.ii)***	682,000
Investment in bonds ***(eliminated - Step 1.iv)***	-
Investment in subsidiary ***(eliminated)***	-
Equipment, net ***(Step 1.iii)***	2,752,000
Patent ***(Step 1.iii)***	70,000
Goodwill, net ***(Step 3)***	20,000
TOTAL ASSETS	***5,781,200***
LIABILITIES AND EQUITY	
Accounts payable (367,200 + 284,000 - ***8,000 Step 1.i)***	359,200
10% Bonds payable (400,000 - ***200,000 Step 1.iv)***	200,000
Total liabilities	***559,200***
Share capital ***(Parent only)***	3,200,000
Retained earnings ***(Step 5)***	1,939,200
Equity attributable to owners of parent	*5,139,200*
Non-controlling interest ***(Step 4)***	82,800
Total equity	***5,222,000***
TOTAL LIABILITIES AND EQUITY	***5,781,200***

Peter Group
Statement of profit or loss
For the year ended December 31, 20x1

Sales ***(Step 1.ii)***	4,560,000
Cost of goods sold ***(Step 1.ii)***	(2,034,000)
Gross profit	2,526,000
Interest income ***(eliminated - Step 1.iv)***	-

Distribution costs	(400,000)
Depreciation expense ***(Step 1.iii)***	(688,000)
Loss on sale of equipment ***(eliminated - Step 1.iv)***	-
Interest expense (10,000 - ***2,500 Step 1.iv)***	(30,000)
Dividend income ***(eliminated - Step 1.v)***	-
Amortization expense on patent ***(Step 1.iii)***	(10,000)
Loss on extinguishment of bonds ***(Step 1.iv)***	(40,000)
Impairment loss on goodwill ***(Step 3)***	(8,000)
Profit for the year	***1,350,000***

Reconciliation using formulas:

Total assets of Peter Co.	5,664,000
Total assets of Simon Co.	720,000
Investment in subsidiary	(488,000)
Fair value adjustments, net (184,000 beg. – 50,000 depreciation)	134,000
Goodwill – net	20,000
Effects of intercompany transactions:	
Current accounts *(elimination of account receivable)*	(8,000)
Inventory transactions *(unrealized profit in ending inventory)*	(26,000)
Equipment transaction *(unamortized balance of deferred loss)*	3,200
Bond transaction *(carrying amount of investment in bonds)*	(238,000)
Consolidated total assets	***5,781,200***

Total liabilities of Peter Co.	684,000
Total liabilities of Simon Co.	83,200
Fair value adjustments, net	-
Effect of intercompany transactions:	
Current accounts *(elimination of account payable)*	(8,000)
Bond transaction *(carrying amount of bonds payable)*	(200,000)
Consolidated total liabilities	***559,200***

Share capital of Peter Co.	3,200,000
Consolidated retained earnings ***(Step 5)***	1,939,200
Equity attributable to owners of the parent	*5,139,200*
Non-controlling interest ***(Step 4)***	82,800
Consolidated total equity	***5,222,000***

35. B *(See Step 1.ii above)*

36. D *(See Step 1.ii above)*

37. A *(See Step 3 above)*

38. C *(See Step 4 above)*

39. A *(See Step 5 above)*

40. D *(See Step 6 above)*

41. C *(See Step 7 above)*

42. A *(See F/S or Reconciliations above)*

43. A *(See F/S or Reconciliations above)*

44. C

Solutions:

All of Big Co.'s shares were exchanged

The ***substance*** of the transaction is analyzed as follows:

Analyses:

- Big Co. lets itself be acquired (***legal form***) for it to gain control over the legal acquirer (***substance***).

Legal form of the agreement: *(Big lets itself be acquired)*
Small Co. issues 150 ordinary shares (2.5 x 60) in exchange for ***all*** of Big's 60 shares outstanding.

Substance of the agreement: *(Big gains control over legal acquirer)*
After the combination, Big gains control because it now owns 60% of Small Co.

Accounting acquiree (Small Co.) issues shares – Actual (Legal):

		40
Small Co.'s currently issued shares	100	***%***
		60
Shares to be issued to Big Co. (2.5 sh. x 60 sh.)	150	***%***
Total shares of Small Co. after the combination	*250*	

Accounting acquirer (Big Co.) issues shares – Reverse (Substance):

		60
Big Co.'s currently issued shares	60	%
Shares to be issued to Small Co.'s shareholders to	***40***	20

enable them to have ***the same interest*** in Big Co. [(60 ÷ ***60%***) x ***40%***]		%
Total	*100*	

The consideration transferred is computed as follows:

Shares of Big ***effectively*** transferred to Small	40
Multiply by: Fair value per share of Big's shares	480
Fair value of consideration effectively transferred	*19,200*

Goodwill (gain on bargain purchase) is computed as follows:

Consideration transferred	19,200
Non-controlling interest in the acquiree	-
Previously held equity interest in the acquiree	-
Total	*19,200*
Fair value of net identifiable assets acquired (24,000 – 8,400)	(15,600)
Goodwill	***3,600***

The consolidated ***share capital*** is computed as follows:

Share capital of Big Co. before the reverse acquisition	7,200
Add: Consideration transferred	19,200
Consolidated share capital	***26,400***

The consolidated ***retained earnings*** are computed as follows:

Retained earnings of ***Big Co.*** before the reverse acquisition	16,800
Consolidated retained earnings	***16,800***

The consolidated statement of financial position immediately after the business combination is shown below:

	Small Co. *(legal parent, accounting acquiree)*	***Big Co.*** *(legal acquiree, accounting acquirer)*	***Small Co.*** *(Consolidated FS in the name of the legal parent)*
Identifiable assets	21,600	44,400	68,400*
Goodwill			3,600
Total assets	21,600	44,400	72,000
Liabilities	7,400	20,400	28,800
Share capital:			
100 ordinary shares	3,600		
60 ordinary shares		7,200	
250 ordinary shares (₱7,200 + ₱19,200)			***26,400***
Retained earnings	9,600	16,800	16,800
Total liabilities and equity	21,600	44,400	72,000

*₱24,000 fair value + ₱44,400 = ₱68,400

The equity structure appearing in the consolidated financial statements (i.e., the number and type of equity interests issued) reflects the equity structure of Small Co. (the legal parent), including the equity interests issued by Small Co. to effect the combination, i.e., 100 sh. + 150 sh.

45. A *(See solution above)*

46. D *(See solution above)*

47. D *(See solution above)*

48. B *(See solution above)*

Case #2: (Refer to fact pattern) Only 54 of Big Co.'s shares were exchanged for Small Co.'s shares.

49. C

Solutions:

Only 54 of Big Co.'s shares were exchanged

The ***substance*** of the transaction is analyzed as follows:

Accounting acquiree (Small Co.) issues shares – Actual (Legal):

Small Co.'s currently issued shares	100	***42.55 %***
Shares to be issued to Big Co. (2.5 sh. x ***54 sh.***)	135	***57.45 %***
Total shares of Small Co. after the combination	*235*	

Accounting acquirer (Big Co.) issues shares – Reverse (Substance):

Big Co.'s shares ***exchanged*** for Small Co.'s shares *(given)*	***54***	57.45%
Shares to be issued to Small Co.'s shareholders to enable them to have ***the same interest*** in Big Co. [(54 ÷ ***57.45%***) x ***42.55%***]	***40***	42.55%
Total	*94*	*100%*

The consideration transferred is computed as follows:

Shares of Big ***effectively*** transferred to Small	40
Multiply: Fair value per share of Big's shares	480
Fair value of consideration effectively transferred	***19,200***

Goodwill (gain on bargain purchase) is computed as follows:

Consideration transferred	19,200

Non-controlling interest in the acquiree	-
Previously held equity interest in the acquiree	-
Total	*19,200*
Fair value of net identifiable assets acquired (24,000 – 8,400)	(15,600)
Goodwill	***3,600***

Notes:

- ☞ Goodwill computation is ***not*** affected if some of the accounting acquirer's shareholders do not exchange their shares with the accounting acquiree's shares.
- ☞ However, ***non-controlling interest*** arises if ***not all*** of the accounting acquirer's shares are exchanged.

The ***non-controlling interest*** is computed as follows:

Total shares of Big Co. before the acquisition	60
Shares of Big Co. exchanged with Small Co.'s shares	(54)
Shares of Big Co. ***not*** exchanged with Small Co.'s shares	6

The controlling and NCI effective interests are computed as follows:

Controlling interest (54 sh. ÷ 60 sh.)	90%
NCI (6 sh. ÷ 60 sh.)	10%

Big Co.'s total equity before acquisition	24,000
Multiply by: NCI %	10%
	2,40
Non-controlling interest	***0***

The consolidated ***share capital*** is computed as follows:

Share capital of Big Co. before the reverse acquisition	7,200
Multiply by: Controlling interest %	90%
Total	*6,480*
Add: Consideration transferred	19,200
Consolidated share capital	***25,680***

The consolidated ***retained earnings*** are computed as follows:

Retained earnings of Big Co. before the reverse acquisition	16,800
Multiply by: Controlling interest %	90%
	15,120
Consolidated retained earnings	***0***

The consolidated statement of financial position immediately after the business combination is shown below:

	Small Co. *(legal parent, accounting acquiree)*	***Big Co.*** *(legal acquiree, accounting acquirer)*	***Small Co.*** *(Consolidated FS in the name of the legal parent)*
Identifiable assets	21,600	44,400	68,400
Goodwill			3,600
Total assets	21,600	44,400	72,000
Liabilities	8,400	20,400	28,800
Share capital:			
100 ordinary shares	3,600		
60 ordinary shares		7,200	
235 ordinary shares (₱6,480 + ₱19,200)			***25,680***
Retained earnings	9,600	16,800	***15,120***
Non-controlling interest			***2,400***
Total liabilities and equity	21,600	44,400	72,000

50. A *(See solutions above)*

51. B *(See solutions above)*

52. A *(See solutions above)*

53. C *(See solutions above)*

Chapter 19 – Consolidated Financial Statements (Part 4)

Multiple Choice – Theory

1. A
2. D
3. C
4. A
5. A
6. B
7. B
8. C
9. A
10. B

Multiple Choice – Computational

Answers at a glance:

1.	D	6.	C	11.	A	16.	A	21.	C	26.	C	31.	B		
2.	D	7.	B	12.	B	17.	B	22.	B	27.	A	32.	A		
3.	E	8.	A	13.	D	18.	C	23.	C	28.	B	33.	B		
4.	E	9.	D	14.	B	19.	A	24.	C	29.	A	34.	B		
5.	C	10.	B	15.	A	20.	B	25.	A	30.	C				

Solutions:

1. D - Since S1 ***already*** holds controlling interest in S2 when P acquired S1, the acquisition date for ***both*** S1 and S2 is on ***January 1, 20x3***.

2. D

3. E - Since S1 acquires S2 only ***after*** P acquired S1, the acquisition dates are: (a) ***January 1, 20x1 for S1*** and (b) ***January 1, 20x3 for S2***.

4. E

5. C

6. C (48,000 + 64,000) = ***112,000*** *'See Step 3 below'*

Solutions:

Step 1: **Analysis of group structure**

The group structure is analyzed as follows:

P's ownership interest in S1	80%

S1's ownership interest in S2	60%

❖ P, S1 and S2 all belong to a vertical group.

The controlling interest and NCI percentages are calculated as follows:

Ownership over S1

Direct holdings of P in S1	80%
NCI in S1 *(squeeze)*	20%
Total	100%

Ownership over S2

Direct holdings of P in S2	0%
Indirect holdings of P in S2 (80% x 60%)*	48%
Total holdings of P in S2	48%
NCI in S2 *(squeeze)*	52%
Total	100%

*The indirect holdings of P in S2 is computed by multiplying P's interest in S1 (80%) by S1's interest in S2 (60%).

Although the computed total holdings of P is only 48%, i.e., less than 50%, it is still presumed that there is control because P controls S1, who in turn controls S2. In substance, it is actually P who has control over S2. This is not unusual in practice. The computation is made only for purposes of mathematical computations during consolidation procedures.

The NCI in S2 is reconciled as follows:

Interest in S2 held by outside shareholders in S1 (20% x 60%)	12%
Interest in S2 held by outside shareholders in S2 (100% - 60% held by S1)	40%
NCI in S2	52%

The controlling interests and NCI's are summarized below:

	S1	***S2***
Owners of P	80%	48%
NCI	20%	52%
Total	100%	100%

Step 2: **Analysis of net assets**

	S1			***S2***		
	Acqn. Date	***Cons. Date***	***Net change***	***Acqn. Date***	***Cons. Date***	***Net change***

Share capital	320,000	320,000		200,000	200,000	
Ret. earnings	120,000	208,000		40,000	112,000	
Totals at carrying amts.	440,000	528,000		240,000	312,000	
FVA at acquisition date	-	-		-	-	
Depreciation of FVA	NIL	-		NIL	-	
Net assets at fair value	***440,000***	***528,000***	***88,000***	***240,000***	***312,000***	***72,000***

Step 3: **Goodwill computation**

The impairment loss on goodwill is determined as follows:

Formula #1:	***S1***	***S2***	***Total***
Consideration transferred *(given)*	400,000	200,000	
Indirect holding adjustment		**(40,000)**	
NCI in the acquiree – at fair values *(given)*	100,000	160,000	
Prev. held equity interest in the acquiree	-	-	
Total	*500,000*	*320,000*	
Fair value of net assets acquired *(Step 2)*	(440,000)	(240,000)	
Goodwill at acquisition date	*60,000*	*80,000*	
Multiply by: Impairment *(given)*	20%	20%	
Impairment loss on goodwill - 20x1	***12,000***	***16,000***	***28,000***

An ***indirect holding adjustment*** is made because the consideration transferred to S2 is not wholly made by P but rather partly by P (80%) and partly by S1 (20%). Only the portion effectively transferred by P (₱200,000 x 80% = ₱160,000) enters into the computation of goodwill.

The indirect holding adjustment is computed as follows:

Total consideration transferred to S2	200,000
Multiply by: NCI in S1	20%
Indirect holding adjustment	***40,000***

The indirect holding adjustment ***affects both*** the computations of *goodwill* and *NCI*.

Since the NCI's are measured at ***fair value***, there must be goodwill attributable to the NCI's. These are computed as follows:

Formula #2:	***S1***	***S2***
Consideration transferred *(given)*	400,000	200,000
Indirect holding adjustment		(40,000)
Less: Prev. held equity interest in the acquiree	-	-
Total	400,000	160,000
Less: P's proportionate sh. in net assets of S1 & S2 (₱440,000 x 80%) & (₱240,000 x 48%)	(352,000)	(115,200)
Goodwill attributable to owners of P – Jan. 1, 20x1	*48,000*	*44,800*
Less: P's share in goodwill impairment (₱12,000 x 80%) & (₱16,000 x 48%)	(9,600)	(7,680)
Goodwill attributable to owners of P – Dec. 31, 20x1	*38,400*	*37,120*
Fair value of NCI *(given)*	100,000	160,000
Less: NCI's proportionate sh. in the net assets of S1 & S2 (₱440,000 x 20%) & (₱240,000 x 52%)	(88,000)	(124,800)
Goodwill attributable to NCI – Jan. 1, 20x1	*12,000*	*35,200*
Less: NCI's share in goodwill impairment (₱12,000 x 20%) & (₱16,000 x 52%)	(2,400)	(8,320)
Goodwill attributable to NCI – Dec. 31, 20x1	*9,600*	*26,880*
Goodwill, net – Dec. 31, 20x1	***48,000***	***64,000***

Step 4: **Non-controlling interest in net assets**

	S1	***S2***	***Total***
Net assets at fair value - 12/31x1 *(Step 2)*	528,000	312,000	
Multiply by: NCI percentage	20%	52%	
Total	*105,600*	*162,240*	
Add: Goodwill to NCI - 12/31x1 *(Step 3)*	9,600	26,880	
Indirect holding adjustment *(Step 3)*		***(40,000)***	
NCI - Dec. 31, 20x1	*115,200*	*149,120*	***264,320***

🔔 Notice that the only difference in the goodwill and NCI computations between a simple group structure and a complex group structure is the ***indirect holding adjustment***.

Step 5: **Consolidated retained earnings**

P's retained earnings – Dec. 31, 20x1	600,000
Consolidation adjustments:	

P's share in the ***net change*** in ***S1's*** net assets [(a)]	70,400	
P's share in the ***net change*** in ***S2's*** net assets [(b)]	34,560	
Unrealized profits (Downstream only)	-	
Gain or loss on extinguishment of bonds	-	
P's sh. in goodwill impairment (₱9,600 + ₱7,680) *(Step 3)*	(17,280)	
Net consolidation adjustments		87,680
Consolidated retained earnings – Dec. 31, 20x1		***687,680***

[(a)] Net change in S1's net assets *(Step 2)* of ₱88,000 x 80% = ₱70,400.
[(b)] Net change in S2's net assets *(Step 2)* of ₱72,000 x 48% = ₱34,560.

Step 6: **Consolidated profit or loss**

	P	***S1***	***S2***	***Consolidated***
Profits before adj.	320,000	88,000	72,000	480,000
Cons. adjustments:				
Unrealized profits	-	-	-	-
Dividend income	-	N/A	N/A	-
Extinguishment of bonds	-	-	-	-
Net cons. adjustments	-	-	-	-
Profits before FVA	320,000	*88,000*	*72,000*	480,000
Depreciation of FVA	(-)	(-)	(-)	(-)
Goodwill impairment	(17,280)	(2,400)	(8,320)	(28,000)
Consolidated profit	302,720	85,600	63,680	***452,000***

Step 7: **Profit or loss attributable to owners of parent and NCIs**

	Owners of P	***NCI in S1***	***NCI in S2***	***Consolidated***
P's profit before FVA *(Step 6)*	320,000	N/A	N/A	320,000
Share in S1's profit before FVA [(c)]	70,400	17,600		88,000
Share in S2's profit before FVA [(d)]	34,560		37,440	72,000
Depreciation of FVA	(-)	(-)	(-)	(-)
Goodwill impairment	(17,280)	(2,400)	(8,320)	(28,000)
Totals	***407,680***	***15,200***	***29,120***	*452,000*

[(c)] Shares in S1's profit before FVA (*Step 6*): (₱88,000 x 80%); (₱88,000 x 20%)
[(d)] Shares in S2's profit before FVA (*Step 6*): (₱72,000 x 48%); (₱72,000 x 52%)

The ***consolidated financial statements*** are prepared as follows:

Consolidated statement of financial position
As at December 31, 20x1

Other assets (800,000 + 480,000 + 320,000)	1,600,000

Goodwill (48,000 + 64,000) - *(Step 3)*	112,000
Total assets	***1,712,000***

Liabilities (120,000 + 152,000 + 8,000)	280,000
Share capital (P only)	480,000
Retained earnings - *(Step 5)*	687,680
Equity attributable to owners of parent	1,167,680
Non-controlling interests - *(Step 4)*	264,320
Total equity	1,432,000
Total liabilities and equity	***1,712,000***

Consolidated statement of profit or loss For the year ended December 31, 20x1	
Revenues (720,000 + 408,000 + 192,000)	1,320,000
Expenses (400,000 + 320,000 + 120,000)	(840,000)
Impairment loss on goodwill - *(Step 3)*	(28,000)
Consolidated profit	***452,000***
Profit attributable to:	
Owners of the parent - *(Step 7)*	407,680
Non-controlling interests (15,200 + 29,120) - *(Step 7)*	44,320
	452,000

7. B *(See Step 4 above)*

8. A *(See Step 5 above)*

9. D *(See Step 6 above)*

10. B *(See Step 7 above)*

11. A *(See solutions above)*

12. B *(See solutions above)*

13. D (20,000 + 16,000) = ***36,000*** *See Step 3 below*

Solutions:

Step 1: **Analysis of group structure**

The group structure is analyzed as follows:

P's ownership interest in S1	80%
S1's ownership interest in S2	60%

❖ P, S1 and S2 all belong to a vertical group.

The controlling interest and NCI percentages are calculated as follows:

Ownership over S1	
Direct holdings of P in S1	80%
NCI in S1 *(squeeze)*	20%
Total	100%

Ownership over S2	
Direct holdings of P in S2	0%
Indirect holdings of P in S2 (80% x 60%)	48%
Total holdings of P in S2	48%
NCI in S2 *(squeeze)*	52%
Total	100%

The ***acquisition dates*** of the subsidiaries are ***January 1, 20x1 for S1*** and ***December 31, 20x1 for S2***. Goodwill and NCI on each of S1 and S2 shall be computed separately on their respective acquisition dates. Their pre-acquisition and post-acquisition reserves are also calculated from these dates.

The controlling interests and NCI's are summarized below:

	S1	***S2***
Owners of P	80%	48%
NCI	20%	52%
Total	100%	100%

Step 2: **Analysis of net assets**

	S1			***S2***		
	Acqn. Date	***Cons. Date***	***Net change***	***Acqn. Date***	***Cons. Date***	***Net change***
Share capital	320,000	320,000		200,000	200,000	
Ret. earnings	120,000	208,000		***112,000***	112,000	
Totals at carrying amts.	440,000	528,000		312,000	312,000	
FVA at acquisition date	-	-		-	-	
Depreciation of FVA	NIL	-		NIL	-	
Net assets at fair value	***440,000***	***528,000***	***88,000***	***312,000***	***312,000***	***-***

***Step 3:* Goodwill computation**

Formula #2:	***S1***	***S2***
Consideration transferred *(given)*	400,000	200,000
Indirect holding adjustment (₱200,000 x 20%)		(40,000)
Less: Prev. held equity interest in the acquiree	-	-
Total	400,000	160,000
Less: P's proportionate sh. in net assets of S1 & S2 (₱440,000 x 80%) & (₱312,000 x 48%)	(352,000)	(149,760)
Goodwill attributable to owners of P (acq'n. dates)	*48,000*	*10,240*
Less: P's sh. in goodwill impairment (₱40,000 x 80%)	(32,000)	-
Goodwill attributable to owners of P – Dec. 31, 20x1	*16,000*	*10,240*
Fair value of NCI *(given)*	100,000	168,000
Less: NCI's proportionate sh. in the net assets of S1 & S2 (₱440,000 x 20%) & (₱312,000 x 52%)	(88,000)	(162,240)
Goodwill attributable to NCI (acquisition dates)	*12,000*	*5,760*
Less: NCI's sh. in goodwill impairment (₱40,000 x 20%)	(8,000)	-
Goodwill attributable to NCI – Dec. 31, 20x1	*4,000*	*5,760*
Goodwill, net – Dec. 31, 20x1	***20,000***	***16,000***

The fair values of the NCIs are determined on the subsidiaries' respective acquisition dates (i.e., Jan. 1, 20x1 for S1 and Dec. 31, 20x1 for S2).

***Step 4:* Non-controlling interest in net assets**

	S1	***S2***	***Total***
Net assets at fair value - 12/31x1 *(Step 2)*	528,000	312,000	
Multiply by: NCI percentage	20%	52%	
Total	*105,600*	*162,240*	
Add: Goodwill to NCI - 12/31x1 *(Step 3)*	4,000	5,760	
Indirect holding adjustment *(Step 3)*		***(40,000)***	
NCI - Dec. 31, 20x1	*109,600*	*128,000*	***237,600***

***Step 5:* Consolidated retained earnings**

P's retained earnings – Dec. 31, 20x1	600,000

Consolidation adjustments:		
P's share in the ***net change*** in ***S1's*** net assets [(a)]	70,400	
P's share in the ***net change*** in ***S2's*** net assets [(b)]	-	
Unrealized profits (Downstream only)	-	
Gain or loss on extinguishment of bonds	-	
P's sh. in goodwill impairment *(Step 3)*	(32,000)	
Net consolidation adjustments		38,400
Consolidated retained earnings – Dec. 31, 20x1		***638,400***

[(a)] Net change in S1's net assets *(Step 2)* of ₱88,000 x 80% = ₱70,400.
[(b)] Net change in S2's net assets *(Step 2)* of ₱0 x 48% = ₱0.

Step 6: **Consolidated profit or loss**

	P	***S1***	***S2***	***Consolidated***
Profits before adj.	320,000	88,000	-	408,000
Cons. adjustments:				
Unrealized profits	-	-	-	-
Dividend income	-	N/A	N/A	-
Extinguishment of bonds	-	-	-	-
Net cons. adjustments	-	-	-	-
Profits before FVA	320,000	*88,000*	-	408,000
Depreciation of FVA	(-)	(-)	(-)	(-)
Goodwill impairment	(32,000)	(8,000)	-	(40,000)
Consolidated profit	288,000	80,000	-	***368,000***

None of S2's profit is included in the 20x1 consolidated financial statements because S2 was acquired only on December 31, 20x1.

Step 7: **Profit or loss attributable to owners of parent and NCIs**

	Owners of P	***NCI in S1***	***NCI in S2***	***Consolidated***
P's profit before FVA *(Step 6)*	320,000	N/A	N/A	320,000
Share in S1's profit before FVA [(c)]	70,400	17,600		88,000
Share in S2's profit before FVA [(d)]	-		-	-
Depreciation of FVA	(-)	(-)	(-)	(-)
Goodwill impairment	(32,000)	(8,000)	-	(40,000)
Totals	***358,400***	***9,600***	***-***	*368,000*

[(c)] Shares in S1's profit before FVA (*Step 6*): (₱88,000 x 80%); (₱88,000 x 20%)
[(d)] Shares in S2's profit before FVA (*Step 6*): (₱0 x 48%); (₱0 x 52%)

The ***consolidated financial statements*** are prepared as follows:

Consolidated statement of financial position	
As at December 31, 20x1	
Other assets (800,000 + 480,000 + 320,000)	1,600,000
Goodwill (20,000 + 16,000) *(Step 3)*	36,000
Total assets	***1,636,000***
Liabilities (120,000 + 152,000 + 8,000)	280,000
Share capital (P only)	480,000
Retained earnings *(Step 5)*	638,400
Owners of parent	1,118,400
Non-controlling interests *(Step 4)*	237,600
Total equity	1,356,000
Total liabilities and equity	***1,636,000***

Consolidated statement of profit or loss	
For the year ended December 31, 20x1	
Revenues (720,000 + 408,000)	1,128,000
Expenses (400,000 + 320,000)	(720,000)
Impairment loss on goodwill *(Step 3)*	(40,000)
Consolidated profit	***368,000***
Profit attributable to:	
Owners of the parent *(Step 7)*	358,400
Non-controlling interests *(Step 7)*	9,600
Consolidated profit	***368,000***

14. B *(See Step 4 above)*

15. A *(See Step 5 above)*

16. A *(See Step 6 above)*

17. B *(See Step 7 above)*

18. C *(See Step solutions above)*

19. A *(See Step solutions above)*

20. B (See Step 3 below)

Solutions:

Step 1: **Analysis of group structure**

The group structure is analyzed as follows:

P's ownership interest in S1 (64,000 sh. ÷ 80,000 sh.*)	80%
P's ownership interest in S2 (12,500 sh. ÷ 50,000 sh.*)	25%
S1's ownership interest in S2 (15,000 sh. ÷ 50,000 sh.*)	30%

*Share capital *divided by* ₱1.00 par value per share.

❖ P, S1 and S2 all belong to a D-shaped (mixed) group.

The controlling interest and NCI percentages are calculated as follows:

Ownership over S1

Direct holdings of P in S1	80%
NCI in S1 *(squeeze)*	20%
Total	100%

Ownership over S2

Direct holdings of P in S2	25%
Indirect holdings of P through S1 (80% x 30%)	24%
Total holdings of P in S2	49%
NCI in S2 *(squeeze)*	51%
Total	100%

The NCI in S2 is reconciled as follows:

Interest in S2 held by outside shareholders in S1 (20% NCI in S1 x 30% interest of S1 in S2)	6%
Interest in S2 held by outside shareholders in S2 (100% - 25% held by P - 30% held by S1)	45%
NCI in S2	51%

The controlling interests and NCI's are summarized below:

	S1	***S2***
Owners of P	80%	49%
NCI	20%	51%
Total	100%	100%

***Step 2:* Analysis of net assets**

	S1			***S2***		
	Acqn. Date	***Cons. Date***	***Net change***	***Acqn. Date***	***Cons. Date***	***Net change***
Share capital	320,000	320,000		200,000	200,000	
Ret. earnings	120,000	208,000		40,000	112,000	
Totals at carrying amts.	440,000	528,000		240,000	312,000	
FVA at acquisition	-	-		-	-	

date						
Depreciation of FVA	NIL	-		NIL	-	
Net assets at fair value	***440,000***	***528,000***	***88,000***	***240,000***	***312,000***	***72,000***

***Step 3:* Goodwill computation**

Formula #2:	***S1***	***S2***
Consideration transferred *(given) & (₱160K + ₱200K)*	400,000	360,000
Indirect holding adjustment *(₱200,000 x 20%)*		(40,000)
Less: Prev. held equity interest in the acquiree	-	-
Total	400,000	320,000
Less: P's proportionate sh. in net assets of S1 & S2 (₱440,000 x 80%) & (₱240,000 x 49%)	(352,000)	(117,600)
Goodwill attributable to owners of P – Jan. 1, 20x1	*48,000*	*202,400*
Less: P's share in goodwill impairment	-	-
Goodwill attributable to owners of P – Dec. 31, 20x1	*48,000*	*202,400*
Fair value of NCI *(given)*	100,000	160,000
Less: NCI's proportionate sh. in the net assets of S1 & S2 (₱440,000 x 20%) & (₱240,000 x 51%)	(88,000)	(122,400)
Goodwill attributable to NCI – Jan. 1, 20x1	*12,000*	*37,600*
Less: NCI's share in goodwill impairment	-	-
Goodwill attributable to NCI – Dec. 31, 20x1	*12,000*	*37,600*
Goodwill, net – Dec. 31, 20x1	***60,000***	***240,000***

***Step 4:* Non-controlling interest in net assets**

	S1	***S2***	***Total***
Net assets at fair value - 12/31x1 *(Step 2)*	528,000	312,000	
Multiply by: NCI percentage	20%	51%	
Total	*105,600*	*159,120*	
Add: Goodwill to NCI - 12/31x1 *(Step 3)*	12,000	37,600	
Indirect holding adjustment *(Step 3)*		***(40,000)***	
NCI - Dec. 31, 20x1	*117,600*	*156,720*	***274,320***

***Step 5:* Consolidated retained earnings**

P's retained earnings – Dec. 31, 20x1	600,000

Consolidation adjustments:		
P's share in the ***net change*** in ***S1's*** net assets [(a)]	70,400	
P's share in the ***net change*** in ***S2's*** net assets [(b)]	35,280	
Unrealized profits (Downstream only)	-	
Gain or loss on extinguishment of bonds	-	
P's sh. in goodwill impairment	-	
Net consolidation adjustments		105,680
Consolidated retained earnings – Dec. 31, 20x1		***705,680***

[(a)] Net change in S1's net assets *(Step 2)* of ₱88,000 x 80% = ₱70,400.
[(b)] Net change in S2's net assets *(Step 2)* of ₱72,000 x 49% = ₱35,280.

Step 6: **Consolidated profit or loss**

	P	***S1***	***S2***	***Consolidated***
Profits before adj.	320,000	88,000	72,000	480,000
Cons. adjustments:				
Unrealized profits	-	-	-	-
Dividend income	-	N/A	N/A	-
Extinguishment of bonds	-	-	-	-
Net cons. adjustments	-	-	-	-
Profits before FVA	320,000	*88,000*	*72,000*	480,000
Depreciation of FVA	(-)	(-)	(-)	(-)
Goodwill impairment	(-)	(-)	(-)	(-)
Consolidated profit	320,000	88,000	72,000	***480,000***

Step 7: **Profit or loss attributable to owners of parent and NCIs**

	Owners of P	***NCI in S1***	***NCI in S2***	***Consolidated***
P's profit before FVA *(Step 6)*	320,000	N/A	N/A	320,000
Share in S1's profit before FVA [(c)]	70,400	17,600		88,000
Share in S2's profit before FVA [(d)]	35,280		36,720	72,000
Depreciation of FVA	(-)	(-)	(-)	(-)
Goodwill impairment	(-)	(-)	(-)	(-)
Totals	***425,680***	***17,600***	***36,720***	*480,000*

[(c)] Shares in S1's profit before FVA (*Step 6*): (₱88,000 x 80%); (₱88,000 x 20%)
[(d)] Shares in S2's profit before FVA (*Step 6*): (₱72,000 x 49%); (₱72,000 x 51%)

The ***consolidated financial statements*** are prepared as follows:

Consolidated statement of financial position	
As at December 31, 20x1	
Other assets (800,000 + 480,000 + 320,000)	1,600,000
Goodwill (60,000 + 240,000) *(Step 3)*	300,000
Total assets	***1,900,000***
Liabilities (280,000 + 152,000 + 8,000)	440,000
Share capital *(P only)*	480,000
Retained earnings *(Step 5)*	705,680
Owners of parent	1,185,680
Non-controlling interests *(Step 4)*	274,320
Total equity	1,460,000
Total liabilities and equity	***1,900,000***

Consolidated statement of profit or loss	
For the year ended December 31, 20x1	
Revenues (720,000 + 408,000 + 192,000)	1,320,000
Expenses (400,000 + 320,000 + 120,000)	(840,000)
Impairment loss on goodwill	-
Consolidated profit	***480,000***
Profit attributable to:	
Owners of the parent *(Step 7)*	425,680
Non-controlling interests (17,600 + 36,720) *(Step 7)*	54,320
	480,000

21. C (See Step 4 above)

22. B (See Step 5 above)

23. C (See Step 6 above)

24. C (See Step 7 above)

25. A (See solutions above)

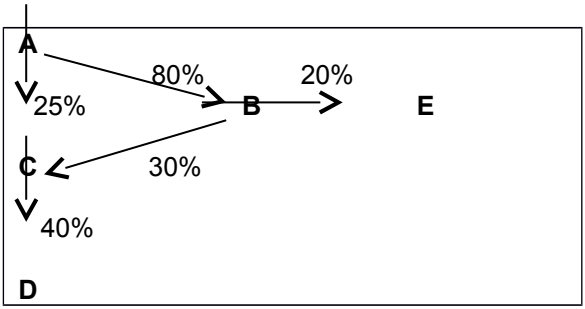
26. C (See solutions above)

27. A (See analysis below)

28. B (See Step 3 below)

Solutions:

Step 1: **Analysis of group structure**



A, B and C belong to a D-shaped (mixed) group structure. Therefore, ***B and C are subsidiaries*** of A.

C and E are associates of B while ***D*** is an associate of ***C***.

The *controlling* and *NCI* are analyzed as follows:

Ownership over B	
Direct holdings of A in B	80%
NCI *(squeeze)*	20%
Total	*100%*
Ownership over C	
Direct holdings of A in C	25%
Indirect holdings of A through B (80% x 30%)	24%
Total holdings of A	49%
NCI *(squeeze)*	51%
Total	*100%*

The NCI in C is reconciled as follows:

Interest in C held by outside shareholders in B (20% NCI in B x 30% interest of B in C)	6%
Interest in C held by outside shareholders in C (100% - 25% held by A - 30% held by B)	45%
NCI in C	51%

The controlling interests and NCI's are summarized below:

	B	***C***
Owners of A	80%	49%
NCI	20%	51%
Total	100%	100%

Notice that ***no*** NCI's are computed for the investments in associates.

Step 1A: Adjustments for the equity method

B and C's accounts are adjusted using the equity method.

	B	***C***
Profits before share in associate's profit	88,000	72,000

Share in D's profit (₱32,000 x 40%)	N/A	12,800
Share in E's profit (₱48,000 x 20%)	9,600	N/A
Adjusted profits	***97,600***	***84,800***

Although C is an associate of B, B's share in C's profit is ***not*** included in the computations above because C is a ***member of the group***, and is therefore accounted for under the 'acquisition method.' Only D and E are accounted for under the 'equity method.'

	B	***C***	***Total***
Investment in associate D *(purchase cost)*		320,000	
Investment in associate E *(purchase cost)*	240,000		
Share in associate's profits	9,600	12,800	
Investments in associates (adjusted)	***249,600***	***332,800***	***582,400***

	B	***C***
Retained earnings - 12/31/x1 (unadjusted)	208,000	112,000
Share in associate's profits	9,600	12,800
Retained earnings - 12/31/x1 (adjusted)	***217,600***	***124,800***

Step 2: **Analysis of net assets**

	B			***C***		
	Acqn. Date	***Cons. Date***	***Net change***	***Acqn. Date***	***Cons. Date***	***Net change***
Share capital	320,000	320,000		200,000	200,000	
Ret. earnings *(Step 1A)*	120,000	***217,600***		40,000	***124,800***	
Totals at carrying amts.	440,000	537,600		240,000	324,800	
FVA at acquisition date	-	-		-	-	
Depreciation of FVA	NIL	-		NIL	-	
Net assets at fair value	***440,000***	***537,600***	***97,600***	***240,000***	***324,800***	***84,800***

Step 3: **Goodwill computation**

Formula #2:	***B***	***C***
Consideration transferred *(given) & (₱160K + ₱200K)*	400,000	360,000
Indirect holding adjustment *(₱200,000 x 20%)*		(40,000)
Less: Prev. held equity interest in the acquiree	-	-

Total	400,000	320,000
Less: A's proportionate sh. in net assets of B & C (₱440,000 x 80%) & (₱240,000 x 49%)	(352,000)	(117,600)
Goodwill attributable to owners of A – Jan. 1, 20x1	*48,000*	*202,400*
Less: A's share in goodwill impairment	-	-
Goodwill attributable to owners of A – Dec. 31, 20x1	*48,000*	*202,400*
Fair value of NCI *(given)*	100,000	160,000
Less: NCI's proportionate sh. in the net assets of B & C (₱440,000 x 20%) & (₱240,000 x 51%)	(88,000)	(122,400)
Goodwill attributable to NCI – Jan. 1, 20x1	*12,000*	*37,600*
Less: NCI's share in goodwill impairment	-	-
Goodwill attributable to NCI – Dec. 31, 20x1	*12,000*	*37,600*
Goodwill, net – Dec. 31, 20x1	***60,000***	***240,000***

***Step 4:* Non-controlling interest in net assets**

	A	***B***	***Total***
Net assets at fair value - 12/31x1 *(Step 2)*	537,600	324,800	
Multiply by: NCI percentage	20%	51%	
Total	*107,520*	*165,648*	
Add: Goodwill to NCI - 12/31x1 *(Step 3)*	12,000	37,600	
Indirect holding adjustment *(Step 3)*		***(40,000)***	
NCI - Dec. 31, 20x1	*119,520*	*163,248*	***282,768***

***Step 5:* Consolidated retained earnings**

A's retained earnings – Dec. 31, 20x1		600,000
Consolidation adjustments:		
A's share in the ***net change*** in ***B's*** net assets *(a)*	78,080	
A's share in the ***net change*** in ***C's*** net assets *(b)*	41,552	
Unrealized profits (Downstream only)	-	
Gain or loss on extinguishment of bonds	-	
A's sh. in goodwill impairment	-	
Net consolidation adjustments		119,632
Consolidated retained earnings – Dec. 31, 20x1		***719,632***

[a] Net change in B's net assets *(Step 2)* of ₱97,600 x 80% = ₱78,080.
[b] Net change in C's net assets *(Step 2)* of ₱84,800 x 49% = ₱41,552.

***Step 6:* Consolidated profit or loss**

	A	*B*	*C*	*Consolidated*
Profits *(Step 1A)*	320,000	***97,600***	***84,800***	502,400
Cons. adjustments:				
Unrealized profits	-	-	-	-
Dividend income	-	N/A	N/A	-
Extinguishment of bonds	-	-	-	-
Net cons. adjustments	-	-	-	-
Profits before FVA	320,000	*97,600*	*84,800*	502,400
Depreciation of FVA	(-)	(-)	(-)	(-)
Goodwill impairment	(-)	(-)	(-)	(-)
Consolidated profit	320,000	97,600	84,800	***502,400***

***Step 7:* Profit or loss attributable to owners of parent and NCIs**

	Owners of A	*NCI in B*	*NCI in C*	*Consolidated*
A's profit before FVA *(Step 6)*	320,000	N/A	N/A	320,000
Share in B's profit before FVA [c]	78,080	19,520		97,600
Share in C's profit before FVA [d]	41,552		43,248	84,800
Depreciation of FVA	(-)	(-)	(-)	(-)
Goodwill impairment	(-)	(-)	(-)	(-)
Totals	***439,632***	***19,520***	***43,248***	*502,400*

[c] Shares in B's profit before FVA (*Step 6*): (₱97,600 x 80%); (₱97,600 x 20%)
[d] Shares in C's profit before FVA (*Step 6*): (₱84,800 x 49%); (₱84,800 x 51%)

Requirement (b): Consolidated financial statements
Consolidated statement of financial position
As at December 31, 20x1

Investments in associates *(Step 1A)*	582,400
Other assets (800,000 + 480,000 + 320,000)	1,600,000
Goodwill (60,000 + 240,000) *(Step 3)*	300,000
Total assets	***2,482,400***
Liabilities (280,000 + 392,000 + 328,000)	1,000,000
Share capital *(A only)*	480,000
Retained earnings *(Step 5)*	719,632
Owners of parent	1,199,632
Non-controlling interests *(Step 4)*	282,768
Total equity	1,482,400
Total liabilities and equity	***2,482,400***

Consolidated statement of profit or loss	
For the year ended December 31, 20x1	
Revenues (720,000 + 408,000 + 192,000)	1,320,000
Expenses (400,000 + 320,000 + 120,000)	(840,000)
Share in profits of associates (12,800 + 9,600) *(Step 1A)*	22,400
Impairment loss on goodwill	-
Consolidated profit	***502,400***
Profit attributable to:	
Owners of the parent *(Step 7)*	439,632
Non-controlling interests (19,520 + 43,248) *(Step 7)*	62,768
	502,400

29. A (See Step 4 below)

30. C (See Step 5 below)

31. B (See Step 6 below)

32. A (See Step 7 below)

33. B (See solutions above)

34. B (See solutions above)

Chapter 20 – Separate Financial Statements

Multiple Choice – Theory

1. D
2. A
3. A
4. D
5. D

Multiple Choice – Computational

Answers at a glance:

1. D
2. A
3. B
4. D

Solutions:

1. D

2. A

Solution:

Investment in subsidiary (XYZ, Inc.) – at cost	***₱4,000,000***

3. B

Solution:

Investment in associate (Alphabets, Co.)	
– ***at Fair value on Dec. 31, 20x1***	***₱ 420,000***

4. D

Solution:

Investment in subsidiary (XYZ, Inc.)	
Dividend revenue (₱1,200,000 x 80%)	***₱ 960,000***
Investment in associate (Alphabets Co.)	
Dividend revenue (₱800,000 x 20%)	₱ 40,000
Unrealized gain on change in fair value (₱420K – ₱400)	20,000
Transaction costs expensed immediately	(80,000)

Net investment income	***₱ 100,000***

(960,000 + 100,000) = ***1,060,000***

Exercises

1. *Solutions:*

Requirement (a): Carrying amount in consolidated financial statements

None, the investment in subsidiary is ***eliminated*** and ***not*** presented in the consolidated financial statements.

Requirement (b): Carrying amount in separate financial statements

Investment in subsidiary – at cost	***P2,000,000***
Investment in associate – at Fair value on Dec. 31, 20x1	***P 210,000***

Requirement (c): Investment income in separate financial statements

Investment in subsidiary:	
Dividend revenue (P600,000 x 80%)	***P 480,000***
Investment in associate:	
Dividend revenue (P400,000 x 20%)	P 80,000
Unrealized gain on change in fair value (P210K – P200)	10,000
Transaction costs expensed immediately	(40,000)
Net investment income	***P 50,000***

Chapter 21 – The Effects of Changes in Foreign Exchange Rates

Multiple Choice – Theory

1. D	6. C	11. D	16. A
2. A	7. A	12. C	17. C
3. D	8. C	13. D	18. D
4. A	9. A	14. A	19. B
5. D	10. A	15. D	20. C
			21. D

Multiple Choice – Computational

Answers at a glance:

1.	D	11.	B	21.	C	31.	A	41.	C	51.	A
2.	C	12.	D	22.	A	32.	B	42.	A		
3.	B	13.	B	23.	A	33.	D	43.	C		
4.	D	14.	C	24.	B	34.	D	44.	A		
5.	A	15.	A	25.	A	35.	A	45.	A		
6.	D	16.	B	26.	D	36.	A	46.	C		
7.	B	17.	B	27.	B	37.	B	47.	B		
8.	C	18.	B	28.	A	38.	C	48.	C		
9.	A	19.	C	29.	D	39.	A	49.	B		
10.	B	20.	B	30.	C	40.	C	50.	D		

Solution:

1. D

Solutions:

Nov. 29, 20x1	***No entry***		
Dec. 1, 20x1	Machine (€40,000 x ₱58) Accounts payable *to record the purchase of machine on an FOB shipping point term*	2,320,000	2,320,000

Dec. 15, 20x1	Accounts payable Foreign exchange gain *to recognize the exchange difference*	40,000	40,000
Dec. 31, 20x1	Foreign exchange loss Accounts payable *to recognize the exchange difference*	120,000	120,000
Jan. 3, 20x2	Accounts payable (₱2.32M – ₱40K + ₱120K) Foreign exchange loss ***(squeeze)*** Cash in bank (€10,000 x ₱61) *to record the settlement of the purchase transaction*	2,400,000 40,000	2,440,000

2. C (See entries above)

3. B (120,000 loss – 40,000 gain) = ***(80,000) loss*** (See entries above)

4. D (See entries above)

5. A (See entries above)

6. D

7. B

Solutions:

Nov. 29, 20x1	No entry		
Dec. 1, 20x1	Accounts receivable (£40,000 x ₱68) Sale *to record the sale of inventories on an FOB shipping point term*	2,720,000	2,720,000
Dec. 31, 20x1	Accounts receivable Foreign exchange gain [a] *to recognize the exchange difference*	80,000	80,000

[a] Accounts receivable – Dec. 1, 20x1 (£40,000 x ₱68)	₱2,720,000
Accounts receivable – Dec. 31, 20x1 (£40,000 x ₱70)	2,800,000
Increase in accounts receivable – FOREX gain	₱ *80,000*

Jan. 3, 20x2	Cash in bank (£40,000 x ₱71) Accounts receivable (₱2.72M+ ₱80K) Foreign exchange gain ***(squeeze)*** *to record the settlement of the sale*	2,840,000	2,800,000 40,000

	transaction		

8. C (See entries above)

9. A (Se entries above)

10. B (80,000 gain in 20x1 + 40,000 gain in 20x2) = ***120,000 total gain*** (See entries above)

11. B

Solutions:

Requirement (a): FOREX gain/loss recognized by ABC Co.

Purchase transaction with Pakistan Co.:

Accounts payable – Dec. 17, 20x1 (PKR 400,000 ÷ PKR 2.04)	₱196,079
Accounts payable – Dec. 31, 20x1 (PKR 400,000 ÷ PKR 2)	200,000
*Increase in accounts payable – **FOREX loss in 20x1***	*₱3,921*
Accounts payable – Dec. 31, 20x1 (PKR 400,000 ÷ PKR 2)	₱200,000
Cash paid on settlement - Jan. 5, 20x2 (PKR 400,000 ÷ PKR 2.083)	192,031
*Decrease in accounts payable – **FOREX gain in 20x2***	*₱7,969*
*Total net FOREX **gain** on the purchase transaction*	***₱4,048***

Sale transaction with Sweden Co.:

Accounts receivable – Dec. 20, 20x1 (SEK 80,000 ÷ SEK 0.1667)	₱479,904
Accounts receivable – Dec. 31, 20x1 (SEK 80,000 ÷ SEK 0.20)	400,000
*Decrease in accounts receivable – **FOREX loss in 20x1***	*₱79,904*
Accounts receivable – Dec. 31, 20x1 (SEK 80,000 ÷ SEK 0.20)	₱400,000
Cash received on settlement – Jan. 5, 20x2 (SEK 80,000 ÷ SEK 0.24)	333,333
*Decrease in accounts receivable – **FOREX loss in 20x2***	*₱66,667*
*Total FOREX **loss** on the sale transaction*	***₱146,571***

12. D

13. B

Solution:

Accounts payable – Dec. 1, 20x1 (BRL 40,000 x ₱24)	₱960,000
Accounts payable – Dec. 31, 20x1 **(*squeeze*)**	***1,040,000***
Increase in accounts payable – FOREX loss in 20x1 (given)	*₱80,000*
Accounts payable – Dec. 31, 20x1	₱1,040,000
Divide by:	BRL40,000
Exchange rate on December 31, 20x1	***₱26: BRL1***

14. C
Solution:

Accounts payable – Dec. 31, 20x1 (*see above*)	₱1,040,000
Cash paid on settlement – 20x2 **(*squeeze*)**	***1,020,000***
Decrease in accounts payable – FOREX gain in 20x2 (given)	*₱20,000*
Cash paid on settlement – 20x2	₱1,020,000
Divide by:	BRL40,000
Exchange rate on settlement date	***₱25.5: BRL1***

15. A ***₱1,040,000*** (*see squeezed amount above*)

16. B ***₱960,000*** (40,000 x ₱24 exchange rate on initial recognition)

17. B

18. B
Solution:
₱2,200,000 ÷ $40,000 = *₱55:$1 exchange rate at the end of reporting period.*
₱55 ÷ 110% = ***₱50 : $1*** ***exchange rate on initial recognition***

19. C
Solution:
Carrying amounts at initial exchange rate:

Loan payable ($40,000 x ₱50)	2,000,000
Interest payable ($40,000 x 10% x 6/12 x ₱50)	100,000
Total payables at initial exchange rate	2,100,000

Carrying amounts at closing rate:	
Loan payable ($40,000 x ₱55)	2,100,000
Interest payable ($40,000 x 10% x 6/12 x ₱55)	110,000
Total payables at closing rate	2,310,000
Increase in payables - FOREX loss	***210,000***

20. B ($100,000 x ₱45) = ***₱4,500,000***

21. C
Solution:

	CIB –in Philippine pesos		
	₱1,920,000		
Opening balance	0		
Sept. 30 (₱45:$1)	3,600,000	880,000	Dec. 16 (₱44:$1)
		₱4,640,000	Dec. 31 (*unadj. bal.*)

Cash in bank – unadjusted balance	₱4,640,000
Cash in bank at closing rate ($100,000 x ₱45)	4,500,000
Decrease in cash in bank – Net foreign exchange loss	***₱ 140,000***

22. A
Solution:

Advances spent at initial exchange rate (MYR 32,000 x ₱14)	448,000
Advances spent at ***average rate*** (MYR 32,000 x ***₱13.5****)	432,000
Decrease in advances receivable – ***FOREX loss – Dec. 31, 20x1***	*16,000*

* Average rate = (₱14 + ₱13) ÷ 2 = ₱13.5

Advances unspent at initial exchange rate (MYR 8,000 x ₱14)	112,000
Advances unspent at ***closing rate*** (MYR 8,000 x ₱13)	104,000
Decrease in advances receivable – ***FOREX loss – Dec. 31, 20x1***	***8,000***
Total FOREX loss – Dec. 31, 20x1 (16,000 + 8,000)	***24,000***

23. A
Solution:

Advances spent at previous closing rate (MYR 6,000 x ₱13)	78,000
Advances spent at ***average rate*** {MYR 6,000 x [(₱13 + ₱12) ÷ 2]}	75,000

Decrease in advances receivable – ***FOREX loss – Jan. 3, 20x2***	***3,000***
Advances unspent at previous closing rate (MYR 2,000 x ₱13)	26,000
Advances unspent at ***spot rate on Jan. 3, 20x2*** (MYR 2,000 x ₱12)	24,000
Decrease in advances receivable – ***FOREX loss – Jan. 3, 20x2***	***2,000***
Total FOREX loss – 20x2 (3,000 + 2,000)	***5,000***

24. B
Solution:

Equipment at carrying amount translated at original spot rate (40,000 x ₱1.2 x 4/5)	38,400
Equipment at recoverable amount translated at the spot rate when the recoverable amount is determined, i.e., Dec. 31, 20x1 (28,000 x ₱1.3)	36,400
Decrease in carrying amount – ***Impairment loss***	***2,000***

25. A
Solution:

Inventory at carrying amount translated at original spot rate (4,000 x ½ x ₱5)	10,000
Inventory at net realizable value translated at the spot rate when the net realizable value is determined, i.e., Dec. 31, 20x1 (1,200 x ₱6)	7,200
Decrease in carrying amount – ***Impairment loss***	***2,800***

26. D 40,000 x (₱50 *selling rate* – ₱48 *selling rate*)] = ***₱80,000 FOREX loss***

27. B [4,000 x (₱13 *buying rate* – ₱10 *buying rate*)] = ***₱12,000 FOREX gain***

28. A
Solution:

Appraised value of equipment – Dec. 31, 20x1 (4.8M x ₱0.26)	1,248,000
Carrying amt. of equipment – Dec. 31, 20x1 [(4M x ₱0.20) x ¾]	600,000

Revaluation surplus – recognized in OCI		***648,000***

29. D
Solution:

1) Translation of opening net assets

Net assets, Jan. 1 - at ***opening rate***	(400M x ₱0.003)	1,200,000
Net assets, Jan. 1 - at ***closing rate***	(400M x ₱0.005)	2,000,000
Increase in opening net assets – gain		*800,000*
Cumulative translation difference – Jan. 1		-

2) Translation of changes in net assets during the period:

Profit - at ***average rate***	(160M x ₱0.004)	640,000
Profit - at ***closing rate***	(160M x ₱0.005)	800,000
Increase in profit – gain		160,000

3) Translation of goodwill

Goodwill, Dec. 31 - at ***opening rate***	-
Goodwill, Dec. 31 - at ***closing rate***	-
Increase in goodwill – gain	-

Total FOREX translation gain – OCI	***960,000***

30. C
Solutions:

Formula #1:	***Jan. 1, 20x1***	***Dec. 31, 20x1***
Consideration transferred	40,000,000	40,000,000
Non-controlling interest in the acquiree	-	-
Prev. held equity interest in the acquiree	-	-
Total	*40,000,000*	*40,000,000*
Fair value of net assets acquired	(32,000,000)	(32,000,000)
Goodwill (in shillings)	*8,000,000*	*8,000,000*
Multiply by: Opening rate/ Closing rate	0.04	0.05
Goodwill (in pesos)	***320,000***	***400,000***

31. A (See solution above)

32. B (See Step 3 below)
Solutions:
***Step 1:* Analysis of effects of intercompany transaction**
We can leave this out because there are no intercompany transactions in the problem.

***Step 2:* Analysis of net assets**

XYZ, Inc.	***Acquisition date (in wons)***	***Consolidation date (in wons)***	***Net change (in wons)***
Share capital	800,000	800,000	
	3,200,00	4,160,00	
Retained earnings	0	0	
		4,960,00	
Totals at carrying amounts	4,000,000	0	
	1,600,00	1,600,00	
FVA at acquisition date [a]	0	0	
Subsequent depreciation of FVA	NIL	-	
Net assets at fair value (in wons)	***5,600,000***	***6,560,000***	***960,000***

[a] The fair value adjustment at acquisition date is determined as follows:

Acquisition-date fair value of XYZ's net assets ***(in wons)***	5,600,000
Acquisition-date carrying amount of XYZ's net assets ***(in wons)***	(4,000,000)
	1,600,000
FVA - attributable to undervalued land (in wons)	***0***
Multiply by: Closing rate	₱0.05
FVA - attributable to undervalued land (in pesos)	*₱80,000*

No subsequent depreciation of FVA is recognized because the FVA relates to land, i.e., non-depreciable asset.

***Step 3:* Goodwill computation**
Formula #1:

Consideration transferred *(in wons)*	6,000,000
Non-controlling interest in the acquiree (5.6M x 20%) – *(Step 2)*	1,120,000
Previously held equity interest in the acquiree	-
Total	*7,120,000*
Fair value of net identifiable assets acquired *(Step 2)*	(5,600,000)

Goodwill at acquisition date	*1,520,000*
Accumulated impairment losses since acquisition date	-
Goodwill, net – current year (in wons)	*1,520,000*
Multiply by: Closing rate	₱0.05
Goodwill, net – current year (in pesos)	***₱76,000***

***Step 4:* Non-controlling interest in net assets**

XYZ's net assets at fair value – Dec. 31, 20x1 *(in wons) (Step 2)*	6,560,000
Multiply by: NCI percentage	20%
Total	1,312,000
Add: Goodwill to NCI *net* of accumulated impairment losses	-
NCI in net assets – Dec. 31, 20x1 (in wons)	*1,312,000*
Multiply by: Closing rate	₱0.05
NCI in net assets – Dec. 31, 20x1 (in pesos)	***₱65,600***

No goodwill is attributed to NCI because NCI is measured at *proportionate share*.

***Step 5:* Consolidated retained earnings**

ABC's retained earnings – Dec. 31, 20x1		₱2,580,000
Consolidation adjustments:		
ABC's share in the ***net change*** in XYZ's net assets [(a)]	₱30,720	
Unamortized deferred gain (Downstream only)	-	
Gain or loss on extinguishment of bonds	-	
Impairment loss on goodwill attributable to Parent	-	
Net consolidation adjustments		30,720
Consol. retained earnings – Dec. 31, 20x1		***₱2,610,720***

[(a)] ABC's share in the net change in XYZ's net assets is computed as:

Net change in XYZ's net assets *(in wons) (Step 2)*	960,000
Multiply by: Controlling interest	80%
ABC's share in the change in XYZ's net assets *(in wons)*	768,000
Multiply by: ***Average exchange rate***	0.04
ABC's share in the net change in XYZ's net assets (in pesos)	*₱30,720*

***Step 5A:* Translation gain (loss)**

The *translation gain (loss)* recognized in other comprehensive income in the ***consolidated financial statements*** is computed as follows:

		Share in translation difference	
		ABC Co. (80%)	***XYZ, Inc. (20%)***
1) Translation of XYZ's opening net assets			
Net assets, Jan. 1 - at ***opening rate*** (5.6M x ₱0.03)	168,000		
Net assets, Jan. 1 - at ***closing rate*** (5.6M x ₱0.05)	280,000		
Increase in opening net assets – gain	*112,000*	89,600	22,400
Cumulative translation difference – Jan. 1	-	-	-
2) Translation of changes in net assets during the period:			
Profit - at ***average rate*** (960K x ₱0.04)	38,400		
Profit - at ***closing rate*** (960K x ₱0.05)	48,000		
Increase in profit - FOREX gain	*9,600*	7,680	1,920
3) Translation of goodwill			
Goodwill, Dec. 31 - at ***opening rate*** (1.52M x₱0.03)	45,600		
Goodwill, Dec. 31 - at ***closing rate*** (1.52M x ₱0.05)	76,000		
Increase in goodwill - FOREX gain	*30,400*	30,400	-
Total translation gain – OCI	***152,000***	*127,680*	*₱24,320*

The total translation adjustment to goodwill is attributed only to ABC because goodwill is measured at *proportionate share* and therefore no goodwill is attributed to NCI.

Step 6: **Consolidated profit or loss and comprehensive income**

	Parent	***Subsidiary***	***Consolidated***
Profits before adjustments	1,440,000	38,400[(a)]	1,478,400
Consolidation adjustments:			
Unrealized profits	-	-	-
Unamortized def. loss	-	-	-
Dividend income	-	N/A	-
Net consolidation adjustments	-	-	-
Profits before FVA	*1,440,000*	*38,400*	1,478,400
Depreciation of FVA	-	-	-
Impairment of goodwill	-	-	-

Consolidated profit	1,440,000	38,400	***1,478,400***
Other comprehensive income:			
Translation gain - *(Step 5A)*	-	-	***152,000***
Consolidated comp. income	1,440,000	38,400	***1,630,400***

[(a)] At average rate (960,000 x .04 = ₱38,400)

Step 7: **P/L and CI attributable to owners of parent and NCI**

	Owners of parent	***NCI***	***Consolidated***
ABC's profit before FVA - *(Step 6)*	1,440,000	N/A	1,440,000
Share in XYZ's profit before FVA [(b)]	30,720	7,680	38,400
Depreciation of FVA	-	-	-
Impairment of goodwill	-	-	-
Profit of loss	***1,470,720***	***7,680***	*1,478,400*
Other comprehensive income:			
Share in translation gain - *(Step 5A)*	127,680	24,320	152,000
Comprehensive income	***1,598,400***	***32,000***	*1,630,400*

[(b)] Shares in XYZ's profit before FVA (*Step 6*): (38,400 x 80%); (38,400 x 20%)

The ***consolidation worksheet*** is prepared as follows:

Consolidation Worksheet
December 31, 20x1

	ABC Co. (in pesos)	*XYZ, Inc. (in wons)*	*Translation*	*XYZ, Inc. (in pesos)*	*Consolidation*	*Consolidated (in pesos)*
Investment in subsidiary	180,000	-			*(eliminated)*	-
Other assets	8,000,000	5,200,000	0.05 (CR)	260,000	(8M + 260K + ***80K FVA***) *(Step 2)*	8,340,000
Goodwill				-	*(Step 3)*	76,000
Total assets	***8,180,000***	***5,200,000***		***260,000***		***8,416,000***
Liabilities	*1,600,000*	*240,000*	0.05 (CR)	12,000	(1,200,000 + 12,000)	*1,612,000*
Share capital	4,000,000	800,000	*(omitted)*	*(omitted)*	*(Parent only)*	4,000,000
Retained earnings	2,580,000	4,160,000	*(omitted)*	*(omitted)*	*(Step 5)*	2,610,720
Translation differences				-	*(Step 5A) – Parent only*	127,680
Equity attrib. to owners of parent						*6,738,400*
Non-controlling interest					*(Step 4)*	65,600
Total equity	*6,580,000*	*4,960,000*	0.05 (CR)	*248,000*		*6,804,000*
Total liabilities and equity	***8,180,000***	***5,200,000***		***260,000***		***8,416,000***
Revenue	3,600,000	2,400,000	0.04 (AR)	96,000	(3,600,000 + 96,000)	3,696,000
Expenses	(2,160,000)	(1,440,000)	0.04 (AR)	(57,600)	(540,000 + 14,400)	(2,217,600)
Profit for the year	*1,440,000*	*960,000*		*38,400*		***1,478,400***
Other comprehensive income:						
Translation gain					*(Step 5A)*	152,000
Comprehensive income	*1,440,000*	*960,000*		*38,400*		***1,630,400***

*(CR) = closing rate; (AR) = average rate. The translations of the individual components of the subsidiary's equity are ***omitted*** because these are not needed in the preparation of the consolidated financial statements (i.e., the subsidiary's equity is eliminated in the consolidated financial statements.

Optional reconciliations:	
Total assets of ABC Co.	8,180,000
Total assets of XYZ, Inc. (5,200,000 x 0.05 closing rate)	260,000
Investment in subsidiary	(180,000)
Fair value adjustments - net *(Step 2)*	80,000
Goodwill – net *(Step 3)*	76,000
Effect of inter-company transactions	-
Consolidated total assets	***8,416,000***

Total liabilities of ABC Co.	1,600,000
Total liabilities of XYZ, Inc. (240,000 x 0.05 closing rate)	12,000
Fair value adjustments - net	-
Effect of inter-company transactions	-
Consolidated total liabilities	***1,612,000***

Share capital of ABC Co.	4,000,000
Share premium of ABC Co.	-
Consolidated retained earnings *(Step 5)*	2,610,720
Translation difference *(Step 5A – Parent only)*	127,680
Equity attributable to owners of the parent	*6,738,400*
Non-controlling interests *(Step 4)*	65,600
Consolidated total equity	***6,804,000***

33. D (See Step 4 above)

34. D (See Step 5 above)

35. A (See Step 5A above)

36. A (See Step 6 above)

37. B (See Step 6 above)

38. C (See Step 7 above)

39. A (See solutions above)

40. C (See solutions above)

41. C (See Step 3 below)
Solutions:
***Step 1:* Analysis of errors and intercompany transactions**

(a1)* Extra-ordinary items – *Prior period error
The separate financial statements of XYZ, Inc. included "extraordinary items."

- ❖ Additional information (a) above states that ADM400 million of the extraordinary items pertain to research costs which were previously capitalized by XYZ but were written off due to the attempt on adapting IFRSs.

- ✓ PAS 1 *Presentation of Financial Statements* prohibits the presentation and disclosure of extraordinary items. PAS 38 *Intangible Assets* prohibits the capitalization of research costs.
- ✓ PAS 8 *Accounting Policies, Changes in Accounting Estimates and Errors* requires corrections of errors to be accounted for as adjustment to the opening balance of retained earnings and not in profit or loss.

The correcting entry is as follows:
Correcting entry #1

Dec. 31	Retained earnings – XYZ, Inc. Extraordinary items *to adjust the opening balance of retained earnings for prior period error*	400	400

(a2)* Extraordinary items – *Impairment loss
- ❖ Additional information (a) above states that the remainder of the extraordinary items pertains to the decline in value of a plant that was damaged during the year.

- ✓ This amount should be recognized as impairment loss and not as extraordinary item.

Entry made (EM) – erroneous entry

20x1	Extraordinary items Accumulated impairment losses	400	400

'Should be' entry (SBE) – correct entry

20x1	Impairment loss Accumulated impairment losses	400	400

Correcting entry #2

Dec. 31	Impairment loss Extraordinary items *to reclassify the erroneous debit to extraordinary items*	400	400

(b & c) Fair value adjustments

Fair value of net assets after research costs *(given)*	8,000
Adjusted carrying amount of net assets, Jan. 1 [a]	(5,600)
	2,40
Fair value adjustment (in drams)	***0***
Divide by: Useful life	5
Annual depreciation of FVA (in drams)	***480***

[a] The adjusted carrying amount of net assets is computed as follows:

Share capital	400
Share premium	800
Retained earnings - adjusted (4,800 - 400) (Step 1.a1)	4,400
Adjusted carrying amount of net assets, Jan. 1	*5,600*

(d) Intercompany inventory transaction

The intercompany sale of inventory is ***downstream***.

Sale price of intercompany sale *(in pesos)*	₱120
Cost of intercompany sale (₱120M x 80%)	(96)
Gross profit	24
Multiply by: Unsold portion in ending inventory	50%
Unrealized gross profit (in pesos)	***₱12***

Additional information (d) above states that a "foreign exchange difference remains in current liabilities." This is analyzed as follows:

XYZ's books

Sept. 1	Raw materials inventory (₱120M x AMD6) Accounts payable *to record the purchase of inventory from parent*	720	720

Entry made (EM) – erroneous entry

Sept. 21	Accounts payable	780	
	Cash in bank (₱120M x AMD6.5)		780
	to record the payment of accounts payable		

'Should be' entry (SBE) – correct entry

Sept. 21	Accounts payable	720	
	FOREX loss	60	
	Cash in bank (₱120M x AMD6.5)		780
	to record the payment of accounts payable		

Correcting entry #3

Dec. 31	FOREX loss	60	
	Accounts payable		60

(e) Inter-company loan transaction

The loan payable was recorded at the exchange rate on January 1 and no adjustment has yet been made as of year-end for the change in exchange rate.

The year-end adjustment is determined as follows:

Loan payable at opening rate (₱200M x AMD5)	1,000
Loan payable at closing rate (₱200M x AMD8)	1,600
Increase in loan payable - FOREX loss (in drams)	***(600)***

Correcting entry (Adjusting entry) #4

Dec. 31	FOREX loss	600	
	Loan payable		600

Additional information (e) above states that ABC Co. has recorded the loan receivable in current assets while XYZ, Inc. has recorded the loan payable in noncurrent liabilities. This provides evidence that the settlement of the loan is neither planned nor likely to occur in the foreseeable future. Therefore, ***the loan shall form part of ABC's net investment in XYZ***.

Accordingly, the FOREX loss of AMD600 shall be recognized in profit or loss in XYZ's separate financial statements but recognized in ***other comprehensive income*** in the ***consolidated financial statements***.

(f) Inter-company dividends

Since the dividends were declared and settled on the same date, no foreign exchange difference shall arise from the transaction.

The dividends paid by XYZ, Inc. are allocated to the owners of the parent and to NCI as follows:

	(in drams)	*(in pesos)* AMD8:₱1
Dividends declared by XYZ, Inc. (in drams)	3,200	400
Allocation:		
Dividends to ABC Co. (60%)	1,920	240
Dividends to NCI (40%)	1,280	160

***Step 2:* Analysis of net assets**

XYZ, Inc.	***Acquisition date***	***Consolidation date***	***Net change***
Share capital	400	400	
Share premium	800	800	
Retained earnings – adjusted *(Step 1.a1)*	4,400	8,000	
Totals at carrying amounts (in drams)	5,600	9,200	
Fair value adjustments *(Step 1.b&c)*	2,400	2,400	
Depreciation of FVA *(Step 1.b&c)*	NIL	(480)	
Unrealized profits (Upstream only)	NIL	**-**	
FOREX loss on trade payable *(Step 1.d)*	NIL	(60)	
Net assets at fair value (in drams)	*8,000*	*11,060*	***3,060***
Forex loss on loan payable *(Step 1.e)*		(600)	(600)
Net assets at fair value (in drams)	***8,000***	***10,460***	*2,460*

The FOREX loss on the loan payable is segregated from the other adjustments because this item is presented in the consolidated financial statements as part of ***other comprehensive income*** and therefore should ***not*** affect consolidated retained earnings. When computing for the consolidated retained earnings, the net change of "₱3,060" will be used (see *Step 5*).

***Step 3:* Goodwill computation**

Formula #1:

Consideration transferred (₱1,760 *investment in subsidiary* x AMD5)	8,800
Non-controlling interest in the acquiree (8,000 x 40%) *(Step 2)*	3,200
Previously held equity interest in the acquiree	-
Total	*12,000*
Fair value of net identifiable assets acquired *(Step 2)*	(8,000)

Goodwill at acquisition date	*4,000*
Accumulated impairment losses since acquisition date	-
Goodwill, net – current year (in drams)	*4,000*
Divide by: Closing rate	8
Goodwill, net – current year (in pesos)	***₱500***

***Step 4:* Non-controlling interest in net assets**		
XYZ's net assets at fair value – Dec. 31, 20x1 *(Step 2)*		10,460
Multiply by: NCI percentage		40%
Total		4,184
Add: Goodwill to NCI *net* of accumulated impairment losses		-
NCI in net assets – Dec. 31, 20x1 (in drams)		*4,184*
Divide by: Closing rate		8
NCI in net assets – Dec. 31, 20x1 (in pesos)		***₱523***

***Step 5:* Consolidated retained earnings**		
ABC's retained earnings – Dec. 31, 20x1		₱6,960
Consolidation adjustments:		
ABC's share in the ***net change*** in XYZ's net assets *(a)*	297	
Unrealized profit (Downstream only) *(Step 1.d)*	(12)	
Gain or loss on extinguishment of bonds	-	
Impairment loss on goodwill attributable to Parent	-	
Net consolidation adjustments		285
Consolidated retained earnings		***₱7,245***

(a) ABC's share in the net change in XYZ's net assets is computed as:

Net change in XYZ's net assets *(in wons) (Step 2)*	***3,060***
Add back: Prior period adjustment of subsidiary *(b)*	400
Adjusted net change in XYZ's net assets (in wons)	3,460
Multiply by: Controlling interest	60%
ABC's share in the change in XYZ's net assets *(in wons)*	2,076
Divide by: ***Average exchange rate***	7
ABC's share in the net change in XYZ's net assets (in pesos)	***₱297***

(b) The prior period adjustment of 400M research costs *(Step 1.a1)* is added back because the parent shall share only in the net change in the subsidiary's net assets after the acquisition date. The parent shall ***not*** share in the changes in the subsidiary's net assets prior to the acquisition date.

***Step 5A:* Translation gain (loss)**

The *translation gain (loss)* recognized in other comprehensive income is computed as follows:

			Share in translation difference	
			ABC Co. (60%)	***XYZ, Inc. (40%)***
1) Translation of XYZ's opening net assets				
Net assets, Jan. 1 - at ***opening rate***	(8,000 ÷ 5)	1,600		
Net assets, Jan. 1 - at ***closing rate***	(8,000 ÷ 8)	1,000		
Decrease in net assets - loss		*(600)*	(360)	(240)
Cumulative translation difference – Jan. 1		-	-	-
2) Translation of changes in XYZ's net assets during the period				
Profit - at ***average rate*** [a]	(6,260 ÷ 7)	894		
Profit - at ***closing rate*** [a]	(6,260 ÷ 8)	783		
Increase in profit – gain		(111)	(67)	(44)
3) Translation of goodwill				
Goodwill, Dec. 31 - at ***opening rate***	(4,000 ÷ 5)	800		
Goodwill, Dec. 31 - at ***closing rate***	(4,000 ÷ 8)	500		
Increase in goodwill - gain		*(300)*	(300)	-
4) FOREX loss on loan payable				
(Step 1.e)	(600 ÷ 7)	(86)	(52)	(34)
5) Translation of FOREX on loan payable				
FOREX loss at ***average rate***	(600 ÷ 7)	(86)		
FOREX loss at ***closing rate***	(600 ÷ 8)	(75)		
Decrease in loss – gain		11	7	4
Total translation loss – OCI		***(1,086)***	*(772)*	*(314)*

[a] The profit is computed as follows:

Profit for the year before adjustments *(in drams)*	6,400
Research costs *(Correcting entry #1) (Step 1.a1)*	400
FOREX loss on trade payable *(Correcting entry #3) (Step*	(60)

1.d)	
*Adjusted profit **before** FVA (in drams)*	*6,740*
Depreciation of FVA, in total *(Step b & c)*	(480)
Adjusted profit after FVA (in drams)	***6,260***

Correcting entry #2 does not affect the reported profit because it is just a reclassification entry (i.e., from extraordinary item to impairment loss).

The FOREX loss on the loan payable is ***not*** included in the computation of profit above because it will be presented in ***OCI***.

Additional notes:

- The total translation adjustment to goodwill is attributed only to ABC because goodwill is measured at *proportionate share* and therefore no goodwill is attributed to NCI.
- The translation differences on the loan payable are included in the computations above because the loan payable ***forms part of ABC's net investment in XYZ***. *(See discussion in Step 1.e)*

***Step 6:* Consolidated profit or loss and comprehensive income**

	Parent	***Subsidiary***	***Consolidated***
Profits before adjustments	2,800	963[(a)]	3,763
Consolidation adjustments:			
Unrealized profits *(Step 1.d)*	(12)	-	(12)
Dividend income *(Step 1.f)*	(240)	N/A	(240)
Net consolidation adjustments	(252)	-	(252)
Profits before FVA	*2,548*	*963*	3,511
Depreciation of FVA [(b)]	(41)	(27)	(68)
Impairment of goodwill	-	-	-
Consolidated profit	2,507	937	***3,443***
Other comprehensive income:			
Translation loss - *(Step 5A)*	-	-	***(1,086)***
Consolidated comp. income	2,507	937	***2,357***

[(a)] The profit is computed as follows:

Adjusted profit ***before*** FVA (in drams) *(see computation above)*	6,740
Divide by: Average rate	7
Adjusted profit before FVA (in pesos)	*963*

[(b)] The shares in the depreciation of FVA are computed as follows:

Annual depreciation of FVA (in drams) *(Step 1.b&c)*	480
Divide by: Average rate	7
Annual depreciation of FVA (in pesos)	*68*

Allocation:

	₱4
Share of ABC (68 x 60%)	***1***
	2
Share of NCI (68 x 40%)	***7***
As allocated	*₱68*

***Step 7:* P/L and CI attributable to owners of parent and NCI**

	Owners of parent	***NCI***	***Consoli-dated***
ABC's profit before FVA - *(Step 6)*	2,548	N/A	2,548
Share in XYZ's profit before FVA [(c)]	578	385	963
Depreciation of FVA	(41)	(27)	(68)
Impairment of goodwill	-	-	-
Profit of loss	***3,085***	***358***	*3,443*
Other comprehensive income:			
Share in translation gain - *(Step 5A)*	(772)	(314)	(1,086)
Comprehensive income	***2,313***	***44***	*2,357*

[(c)] Shares in XYZ's profit before FVA (*Step 6*): (₱963 x 60%); (₱963 x 40%)

42. A (See Step 4)

43. C (See Step 5)

44. A (See Step 5A)

45. A (See Step 6)

46. C (See Step 7)

47. B

Solution:

Aug. 1, 20x1	Cash *(Consideration received)*	500,000	
	Investment account *(Investment retained)*	0	
	NCI	-	
	Net identifiable assets of former subsidiary	82,400	412,000
	Goodwill		12,000
	Gain on disposal (squeeze)		***158,400***

48. C

Solution:

Net monetary items, end.–***Historical*** (184K + 296K - 120K)		360,000
Less: Net monetary items, end. – ***Restated:***		
Net monetary assets - Jan. 1 *(restated)* (160,000 *given* x 140/120)	186,667	
Changes in net monetary items during the year:		
Sales *(restated) – see worksheet above*	537,600	
Purchases *(restated) – see worksheet above*	(134,400)	
Other operating expenses *(restated)*	(179,200)	410,668
Purchasing power loss		***(50,668)***

49. B

Solutions:

	Historical	*Fraction*	*Restated (in current AOA)*	*Closing rate*	*Translated (in Pesos)*
Cash	184,000	N/A	184,000	0.5	92,000
Accounts receivable	296,000	N/A	296,000	0.5	148,000
Inventory	160,000	140/125	179,200	0.5	89,600
Building	400,000	140/100	560,000	0.5	280,000
Accumulated depreciation	(80,000)	140/100	(112,000)	0.5	(56,000)
TOTAL ASSETS	***960,000***		***1,107,200***		***553,600***
Loan payable	120,000	N/A	120,000	0.5	60,000
Share capital	400,000	140/100	560,000	0.5	280,000
Retained earnings	440,000	***(squeeze)***	*427,200*	0.5	213,600
Total equity	*840,000*		*987,200*		*493,600*
TOTAL LIABILITIES & EQUITY	***960,000***		***1,107,200***		***553,600***
Sales	480,000	140/125	537,600	0.5	268,800
Inventory, Jan. 1	240,000	140/110	305,455		
Purchases	120,000	140/125	134,400		
Total goods avail. for sale	*360,000*		*439,855*		
Inventory, Dec. 31	(160,000)	140/125	(179,200)		
Cost of sales	200,000		260,655	0.5	130,328
Gross profit	*280,000*		*276,945*	0.5	*138,472*
Depreciation	(40,000)	140/100	(56,000)	0.5	(28,000)
Other operating expenses	(160,000)	140/125	(179,200)	0.5	(89,600)
Purchasing power loss [a]			(50,668)	0.5	(25,334)

PROFIT FOR THE YEAR	***80,000***	***(8,923)***	***(4,462)***

50. D (See worksheet above)

51. A (See worksheet above)

Exercises

1. *Answers:*

a. ABC's *presentation currency* is ***Canadian dollars***. This is a requirement of the Canadian financial markets regulator for listed companies in Canada.

b. ABC's *functional currency* is likely to be ***Philippine pesos***, even though the company is based in Canada. This is because its operating activities take place in the Philippines and so the company will be economically dependent on the pesos ***if*** most of its sales and operating expenses are in pesos.

c. The Japanese yen is deemed a *foreign currency* for the purpose of preparing ABC's accounts.

2. *Answers:*

a. Since ABC Philippines Co. is essentially an ***extension*** of the U.S. main office, ABC Philippines Co.'s *functional currency* is the **U.S. dollar**, i.e., ***the same*** with the main office's functional currency.

   Using the *primary factors* listed earlier, the U.S. dollar is the currency that ***mainly influences*** ABC Philippines Co.'s sales prices and costs of goods sold.

b. ABC Philippines Co.'s *presentation currency* is the **Philippine pesos**. ABC Philippines Co.'s annual financial statements to be filed with the Philippine SEC and the BIR shall be ***presented*** in *Philippine pesos.*

3. *Answer:*

The functional currency should be changed to Philippine pesos at the end of 20x1 if it is considered that the ***underlying transactions, events, and conditions of business have changed***.

4. *Solution:*

Nov. 29, 20x1	No entry		
Dec. 1, 20x1	Machine (€20,000 x P58) Accounts payable *to record the purchase of machine on an FOB shipping point term*	1,160,000	1,160,000

Dec. 15, 20x1	Accounts payable Foreign exchange gain* *to recognize FOREX gain on the exchange difference*	20,000	20,000

*Accounts payable – Dec. 15, 20x1 (€20,000 x P57) P1,140,000
Accounts payable – Dec. 1, 20x1 (€20,000 x P58) 1,160,000
Decrease in accounts payable – FOREX gain ***P 20,000***

Dec. 31, 20x1	Foreign exchange loss* Accounts payable *to recognize FOREX loss on the exchange difference*	60,000	60,000

* Accounts payable – Dec. 31, 20x1 (€20,000 x P60) P1,200,000
Accounts payable – Dec. 15, 20x1 (€20,000 x P57) 1,140,000
Increase in accounts payable – FOREX loss ***P 60,000***

Total net foreign exchange loss recognized in 20x1 is *P40,000* (60,000 *loss* – 20,000 *gain*).

Jan. 3, 20x2	Accounts payable Foreign exchange loss *(squeeze)* Cash in bank (€20,000 x P61) *to record the settlement of the purchase transaction*	1,200,000 20,000	 1,220,000

The foreign exchange loss of P20,000 is recognized in profit or loss in ***20x2***.

5. *Solution:*

Nov. 29, 20x1	No entry		
Dec. 1, 20x1	Accounts receivable (£20,000 x P68) Sale *to record the sale of inventories on an FOB shipping point term*	1,160,000	1,160,000
Dec. 31, 20x1	Accounts receivable Foreign exchange gain* *to recognize FOREX gain on the exchange difference*	40,000	40,000

*Accounts receivable – Dec. 1, 20x1 (£20,000 x P68) P1,160,000

Accounts receivable – Dec. 31, 20x1 (£20,000 x P70)		1,140,000
Increase in accounts receivable – FOREX gain		***P 40,000***

Jan. 3, 20x2	Cash in bank (£20,000 x P71)	1,420,000	
	Accounts receivable		1,400,000
	Foreign exchange gain		0
	(squeeze)		20,000
	to record the settlement of the sale transaction		

6. *Solutions:*

Requirement (a): FOREX gain/loss recognized by ABC Co.

Purchase transaction:

Accounts payable – Dec. 17, 20x1 (PKR 200,000 ÷ PKR 2.04)	98,040
Accounts payable – Dec. 31, 20x1 (PKR 200,000 ÷ PKR 2)	100,000
*Increase in accounts payable – **FOREX loss in 20x1***	***1,960***
Accounts payable – Dec. 31, 20x1 (PKR 200,000 ÷ PKR 2)	100,000
Cash paid on settlement - Jan. 5, 20x2 (PKR 200,000 ÷ PKR 2.083)	96,016
*Decrease in accounts payable – **FOREX gain in 20x2***	***3,984***
Total net FOREX gain on the purchase transaction	*2,024*

Sale transaction:

Accounts receivable – Dec. 20, 20x1 (SEK 40,000 ÷ SEK 0.1667)	239,952
Accounts receivable – Dec. 31, 20x1 (SEK 40,000 ÷ SEK 0.20)	200,000
*Decrease in accounts receivable – **FOREX loss in 20x1***	***39,952***
Accounts receivable – Dec. 31, 20x1 (SEK 40,000 ÷ SEK 0.20)	200,000
Cash received on settlement – Jan. 5, 20x2 (SEK 40,000 ÷ SEK 0.24)	166,666
*Decrease in accounts receivable – **FOREX loss in 20x2***	***33,334***
Total FOREX loss on the sale transaction	*73,286*

Requirement (b): FOREX gain/loss recognized by Pakistani Co. and Swedish Co.

*Answer: **Zero**. Pakistani Co. and Swedish Co. will **not** recognize any FOREX gain/loss on the transactions because the transactions are settled in their respective functional currencies, not foreign currencies.*

7. *Solutions:*
Analysis:
For a FOREX gain to be recognized on the ***receivable***, *more dollars* should have been received. For that to happen, the *indirect quotation* should ***decrease***.

Let us assume the following information:
Exchange rate at initial recognition = $.020:P1
Exchange rate at settlement = $.018:P1 ***(decrease)***

Receivable at initial recognition: ($2,000 ÷ $.020) = P100,000
Receivable at settlement: ($2,000 ÷ $.018) = 111,110
FOREX gain *P 11,110*

For a FOREX loss to be recognized on the ***payable***, *more yens* should have been paid. For that to happen, the *indirect quotation* should also ***decrease***.

Let us assume the following information:
Exchange rate at initial recognition = ¥1.70:P1
Exchange rate at settlement = ¥1.50:P1 ***(decrease)***

Payable at initial recognition: (¥200,000 ÷ ¥1.70) = P117,648
Payable at settlement: (¥200,000 ÷ ¥1.50) = 133,334
FOREX loss *(P 15,686)*

Answer: The movements in the dollar-to-P1 and yen-to-P1 exchange rates are ***decrease*** and ***decrease***, respectively.

8. *Solutions:*
Requirement (a): Exchange rates

Accounts payable – Dec. 1, 20x1 (BRL 20,000 x P24)	480,000
Accounts payable – Dec. 31, 20x1 (***squeeze***)	***520,000***
Increase in accounts payable – FOREX loss in 20x1	***40,000***

Accounts payable – Dec. 31, 20x1	Php 520,000
Divide by:	BRL 20,000
Exchange rate on December 31, 20x1	***P26: BRL1***

Accounts payable – Dec. 31, 20x1 (*see above*)	520,000

Cash paid on settlement – 20x2 (***squeeze***)	***510,000***
	10,000
Decrease in accounts payable – FOREX gain in 20x2	*0*

Cash paid on settlement – 20x2	Php 510,000
Divide by:	BRL 20,000
Exchange rate on settlement date	***P25.5: BRL1***

Requirement (b): Carrying amount of accounts payable – Dec. 31, 20x2
Accounts payable – Dec. 31, 20x1 (*see squeezed amount above*)
Php 520,000

Requirement (c): Cost of equipment in 20x1 and 20x2 financial statements
Cost of equipment (20,000 x P24 exchange rate on initial recognition)
Php 480,000

9. *Solution:*
P2,200,000 ÷ $40,000 = *P55:$1 exchange rate at the end of reporting period.*
P55 ÷ 110% = ***P50 : $1 exchange rate on initial recognition***

10. *Solution:*

Carrying amounts at initial exchange rate:	
Loan payable ($20,000 x P50)	1,000,000
Interest payable ($20,000 x 10% x 6/12 x P50)	50,000
Total payables at initial exchange rate	1,050,000
Carrying amounts at closing rate:	
Loan payable ($20,000 x P55)	1,100,000
Interest payable ($20,000 x 10% x 6/12 x P55)	55,000
Total payables at closing rate	1,155,000
Increase in payables - FOREX loss	***105,000***

11. *Solutions:*
Requirement (a): Cash in bank at year-end
($50,000 x P45) = ***P2,250,000***

Requirement (b): Net foreign exchange gain or loss
The unadjusted balance of the cash in bank account translated to Philippine pesos using spot exchange rates on transaction dates is determined as follows:

	CIB –in Philippine pesos
Opening balance	P960,000

	1,800,000		
Sept. 30 (P45:$1)		440,000	Dec. 16 (P44:$1)
			Dec. 31
		P2,320,000	(*unadjusted bal.*)

Cash in bank – unadjusted balance	P2,320,000
Cash in bank at closing rate ($50,000 x P45)	2,250,000
Decrease in cash in bank – Net foreign exchange loss	***P 70,000***

The net FOREX loss is analyzed as follows:

Sept. 30	Cash in bank ($40,000 x P45) Sales *to record sale in foreign currency*	1,800,000	1,800,000
Dec. 16	Expenses (10,000 x P44) [a] FOREX loss Cash in bank (10,000 x P48) [b]	440,000 40,000	 480,000
Dec. 31	FOREX loss [c] Cash in bank	30,000	 30,000

[a] The withdrawal is assumed to have been made to defray expenses.

[b] It is assumed that FIFO is used, i.e., the amount withdrawn is from the opening balance.

[c] Cash in bank at spot exchange rates at dates of transaction:

Opening balance ($20,000 - $10,000) x P48	P480,000
Cash sale ($40,000 x P45)	1,800,000
Total	*2,280,000*
Cash in bank – adjusted year-end balance ($50,000 x P45)	2,250,000
FOREX loss – year-end adjustment	*P 30,000*

Total FOREX loss (P40,000 + P30,000) ***P 70,000***

12. *Solutions:*

Requirement (a): FOREX gain or loss on December 31, 20x1

Advances spent at initial exchange rate (MYR 16,000 x P14)	224,000
Advances spent at ***average rate*** (MYR 16,000 x ***P13.5****)	216,000
*Decrease in advances receivable – **FOREX loss – Dec. 31, 20x1***	***8,000***

* Average rate = (P14 + P13) ÷ 2 = P13.5

Advances unspent at initial exchange rate (MYR 4,000 x P14)	56,000
Advances unspent at ***closing rate*** (MYR 4,000 x P13)	52,000
*Decrease in advances receivable – **FOREX loss – Dec. 31, 20x1***	***4,000***
Total FOREX loss – Dec. 31, 20x1 (8,000 + 4,000)	***12,000***

The pertinent entries are:

Dec. 15, 20x1	Advances to officer (20,000 x P14)	280,000	
	Cash in bank		280,000
Dec. 31, 20x1	Expenses {16,000 x [(P14 + P13) ÷ 2]}	216,000	
	FOREX loss	8,000	
	Advances to officer (16,000 x P14)		224,000
Dec. 31, 20x1	FOREX loss [4,000 x (P14 – P13)]	4,000	
	Advances to officer		4,000

Requirement (b): FOREX gain or loss on December 31, 20x2

Advances spent at previous closing rate (MYR 3,000 x P13)	39,000
Advances spent at ***average rate*** {MYR 3,000 x [(P13 + P12) ÷ 2]}	37,500
Decrease in advances receivable – ***FOREX loss – Dec. 31, 20x2***	***1,500***

Advances unspent at previous closing rate (MYR 1,000 x P13)	13,000
Advances spent at ***spot exchange rate on Jan. 5, 20x2*** (MYR 1,000 x P12)	12,000
Decrease in advances receivable – ***FOREX loss – Dec. 31, 20x2***	***1,000***

Total FOREX loss – 20x2 (1,500 + 1,000) ***2,500***

The pertinent entries are:

Jan. 3, 20x2	Expenses	37,500	
	FOREX loss	1,500	
	Advances to officer		39,000
Jan. 3, 20x2	Cash on hand	12,000	
	FOREX loss	1,000	
	Advances to officer		13,000

13. *Solutions:*

Equipment at carrying amount translated at original spot rate (20,000 x P1.2 x 4/5)	19,200
Equipment at recoverable amount translated at the spot rate when the recoverable amount is determined, i.e., Dec. 31, 20x1 (14,000 x P1.3)	18,200
Decrease in carrying amount – ***Impairment loss***	***1,000***
Inventory at carrying amount translated at original spot rate (2,000 x ½ x P5)	5,000
Inventory at net realizable value translated at the spot rate when the net realizable value is determined, i.e., Dec. 31, 20x1 (600 x P6)	3,600
Decrease in carrying amount – ***Impairment loss***	***1,400***

The year-end adjusting entries are as follows:

Dec.	Impairment loss	1,000	

31	Accumulated impairment losses *to recognize impairment in equipment*		1,000
Dec. 31	Impairment loss Inventory *to recognize inventory write-down*	1,400	1,400

14. *Solutions:*

Purchase transaction:

[20,000 x (P50 *selling rate* – P48 *selling rate*)] = ***P40,000 FOREX loss***

Sale transaction:

[2,000 x (P13 *buying rate* – P10 *buying rate*)] = ***P6,000 FOREX gain***

15. *Solution:*

Appraised value of equipment – Dec. 31, 20x1 (2.4M x P0.26)	624,000
Carrying amount of equipment – Dec. 31, 20x1 [(2M x P0.20) x ¾]	(300,000)
Revaluation surplus – recognized in other comprehensive income	***324,000***

The pertinent entry is:

Dec. 31	Equipment Revaluation surplus *to recognize revaluation surplus*	162,000	162,000

16. *Solution:*

Net assets of sub., Jan. 1 - at opening rate	(200M x P0.003)	600,000	
Net assets of sub., Jan. 1 - at closing rate	(200M x P0.005)	1,000,000	
Increase in net assets - FOREX gain		*400,000*	
			400,000
ABC's share in FOREX gain		100%	
Profit of subsidiary at average rate	(80M x P0.004)	320,000	
Profit of sub at closing rate	(80M x P0.005)	400,000	

Increase in profit - FOREX translation gain	80,000	
Parent's share in FOREX gain	100%	80,000
Total FOREX translation gain – OCI		***480,000***

17. *Solutions:*

	Jan. 1, 20x1	***Dec. 31, 20x1***
Consideration transferred	20,000,000	20,000,000
Non-controlling interest in the acquiree	-	-
Previously held equity interest in the acquiree	-	-
Total	*20,000,000*	*20,000,000*
Fair value of net identifiable assets acquired	(16,000,000)	(16,000,000)
Goodwill (in shillings)	*4,000,000*	*4,000,000*
Multiply by: Opening rate/ Closing rate	0.04	0.05
Goodwill (in pesos)	***160,000***	***200,000***

18. *Solutions:*

1. Analysis of net assets

Table 1: *XYZ, Inc.'s net assets*	***Acquisition date (wons)***	***Consolidation date (wons)***	***Net change***
Share capital	400,000	400,000	
Retained earnings	1,600,000	2,080,000	
Total at carrying amounts	2,000,000	2,480,000	
FVA at acquisition date [a]	800,000	800,000	
Subsequent depreciation/amortization of FVA	NIL	-	
Subsidiary's net assets at fair value *(in wons)*	***2,800,000***	***3,280,000***	***480,000***

Table 1.A

[a] The fair value adjustment at acquisition date is determined as follows:

Acquisition-date fair value of XYZ's net assets	2,800,000
Acquisition-date carrying amount of XYZ's net assets	(2,000,000)
Excess of fair value attributable to undervalued land (in wons)	***800,000***
Multiply by: Closing rate	0.05
Fair value adjustment on Land - Dec. 31, 20x1 (in pesos)	***40,000***

2. Computation of goodwill

	(wons)
Consideration transferred	3,000,000
Non-controlling interest in the acquiree [1.4M *(see table 1)* x 20%]	560,000
Previously held equity interest in the acquiree	-
Total	*3,560,000*
Fair value of net identifiable assets acquired *(see table 1)*	(2,800,000)
Goodwill – in wons	*760,000*
Multiply by: Closing rate	P0.05
Goodwill – in pesos	***38,000***

3. NCI in net assets

Net assets of XYZ – fair value at Dec. 31, 20x1 *(see Table 1)*	3,280,000
Multiply by: NCI percentage	20%
Total	656,000
Add: Goodwill to NCI *net* of accumulated impairment losses	-
NCI in net assets – Dec. 31, 20x1 (in wons)	*656,000*
Multiply by: Closing rate	P0.05
NCI in net assets – Dec. 31, 20x1 (in pesos)	***32,800***

There is ***no*** goodwill attributable to NCI because NCI is measured at its proportionate share in the subsidiary's net assets.

4. Consolidated retained earnings

Parent's retained earnings in current year-end	1,290,000

Consolidation adjustments:		
Parent's share in the ***net change*** in subsidiary's net assets	15,360 [a]	
Unrealized profits (Downstream only)		
Gain or loss on extinguishment of bonds		
Impairment loss on goodwill attributable to Parent		
Net consolidation adjustments		15,360
Consolidated retained earnings		***1,305,360***

[a] Change in XYZ's net assets *(see Table 1)*	480,000
Multiply by: Controlling interest	80%
ABC's share in the change in XYZ's net assets – (in wons)	384,000
Multiply by: ***Average exchange rate***	0.04
ABC's share in the change in XYZ's net assets – (in pesos)	***15,360***

5. Translation gain (loss)

The *translation gain (loss)* to be recognized in other comprehensive income is computed as follows:

Table 2

			Share in translation difference	
			ABC Co. (80%)	***XYZ, Inc. (20%)***
1) Translation of XYZ's net assets				
Net assets of sub., Jan. 1 - at opening rate	(2.8M x P0.03)	84,000		
Net assets of sub., Jan. 1 - at closing rate	(2.8M x P0.05)	140,000		
Increase in net assets - FOREX gain		*56,000*	44,800	11,200
2) Translation of goodwill				
Goodwill, Dec. 31 - at opening rate	(760K x P0.03)	22,800		
Goodwill, Dec. 31 - at closing rate	(760K x P0.05)	38,000		
Increase in goodwill - FOREX gain		*15,200*	15,200	-
3) Translation of XYZ's profit				
Profit of subsidiary at average rate	(480K x P0.04)	19,200		
Profit of sub at closing rate	(480K x P0.05)	24,000		

Increase in profit - FOREX gain	4,800	3,840	960
Total FOREX translation gain – OCI	***76,000***	***63,840***	*12,160*

Notice that the total translation adjustment to goodwill is attributed only to ABC. This is because goodwill is measured at "proportionate share," and therefore there is no goodwill to NCI.

6. Consolidated profit or loss and Consolidated comprehensive income

	ABC Co.	***XYZ, Inc.***	***Consolidated***
Profit before adjustment	720,000	19,200*	739,200
Consolidation adjustments:			
Unrealized profits (Downstream only)	(-)	(-)	-
Dividend received from subsidiary	(-)	N/A	-
Gain or loss on extinguishment of bonds	(-)	(-)	-
Net consolidation adjustments	(-)	(-)	-
Profits before fair value adjustments	***720,000***	***19,200***	739,200
Depreciation/amortization of FVA	(-)	(-)	(-)
Consolidated profit	720,000	19,200	***739,200***
Other comprehensive income:			
Gain or loss on translation of foreign operation *(see Table 2)*	-	***76,000***	76,000
Consolidated comprehensive income	720,000	95,200	***815,200***

*At average rate (480,000 x .04 = 19,200)

7. Comprehensive income attributable to owners of parent and to NCI

	Owners of parent	***NCI***	***Consolidated***

Parent's profit before FVA	720,000	N/A	720,000
Share in the subsidiary's profit before FVA [a]	15,360	3,840	19,200
Depreciation/ amortization of fair values	(-)	(-)	(-)
Share in impairment loss on goodwill	(-)	(-)	(-)
Consolidated profit for the year	***735,360***	***3,840***	***739,200***
Other comprehensive income:			
Share in translation gain *(see Table 2)*	63,840	12,160	76,000
Consolidated comprehensive income	***799,200***	***16,000***	***815,200***

[a](19,200 x 80% = 15,360); (19,200 x 20% = 3,840)

The ***consolidation working papers*** are prepared as follows:

Statement of financial position
As at December 31, 20x1

	ABC Co. *(in pesos)*	***XYZ, Inc.*** *(in wons)*		***Consolidated*** *(in pesos)*
Investment in subsidiary	90,000	-	(90,000)	-
Other assets	4,000,000	2,600,000	[P4M + (2.6M x P.05)]	4,130,000
Land			*(see Table 1.A)*	40,000
Goodwill			*(see 'Step 2')*	38,000
Total assets	***4,090,000***	***2,600,000***		***4,208,000***
Liabilities	*800,000*	*120,000*	[P800K + (120K x P.05)]	*806,000*
Share capital	2,000,000	400,000	(400,000)	2,000,000
Retained earnings	1,290,000	2,080,000	*(see 'Step 4')*	1,305,360
Translation differences on foreign operation	-	-	*(see 'Step 5')*	63,840
Equity attributable				*3,369,200*

to owners of the parent				
Non-controlling interest	-	-	*(see 'Step 3')*	32,800
Total equity	*3,290,000*	*2,480,000*		*3,402,000*
Total liabilities and equity	***4,090,000***	***2,600,000***		***4,208,000***

Statement of profit or loss and other comprehensive income
For the year ended December 31, 20x1

	ABC Co.	***XYZ, Inc.***	*Average*	***XYZ, Inc.***	***Consolidated***
	(in pesos)	*(in wons)*	*rate*	*(in pesos)*	*(in pesos)*
Revenue	1,800,000	1,200,000	0.040	48,000	1,848,000
Expenses	(1,080,000)	(720,000)	0.040	(28,800)	(1,108,800)
Profit for the year	*720,000*	*480,000*		*19,200*	***739,200***
Other comprehensive income:					
Gain on translation of foreign operation	-	-	*(see 'Step 5')*	-	76,000
Total comprehensive income for the year	*720,000*	*480,000*		*19,200*	***815,200***

	Owners of parent	***NCI***	***Consolidated***
ABC's profit (see statement above)	720,000	N/A	720,000
Share in XYZ's profit (90%; 10%)	15,360	3,840	19,200
Total profit	***735,360***	***3,840***	***739,200***
Share in translation gain *(see 'Step 5')*	63,840	12,160	76,000
Total comprehensive income	***799,200***	***16,000***	***815,200***

Optional reconciliations:

1) Consolidated total assets

Total assets of ABC Co.	4,090,000
Total assets of XYZ, Inc. (2.6M x 0.05)	130,000

Investment in subsidiary	(90,000)
Fair value adjustments - net *(see Table 1.A)*	40,000
Goodwill – net *(see 'Step 2')*	38,000
Effect of inter-company transactions	-
Consolidated total assets	***4,208,000***

2) Consolidated total liabilities

Total liabilities of ABC Co.	800,000
Total liabilities of XYZ, Inc. (120,000 x 0.05)	6,000
Fair value adjustments - net	-
Effect of inter-company transactions	-
Consolidated total liabilities	***806,000***

3) Consolidated total equity

Share capital of ABC Co.	2,000,000
Share premium of ABC Co.	-
Consolidated retained earnings *(see 'Step 4')*	1,305,360
Exchange differences on translation of foreign operation *(see 'Step 5')*	63,840
Equity attributable to owners of the parent	*3,369,200*
Non-controlling interests *(see 'Step 3')*	32,800
Consolidated total equity	***3,402,000***

19. *Solutions:*

1. Errors, adjustments and inter-company transactions

a.1: **Extra-ordinary items – *Prior period error***

The separate financial statements of XYZ, Inc. included "extraordinary items."

Additional information (a) above states that ADM200 million of the extraordinary items pertain to research costs which were previously capitalized by XYZ but were written off due to the attempt on adapting IFRSs.

PAS 1 *Presentation of Financial Statements* prohibits the presentation and disclosure of extraordinary items. PAS 38 *Intangible Assets* prohibits the capitalization of research costs.

PAS 8 *Accounting Policies, Changes in Accounting Estimates and Errors* requires corrections of errors to be accounted for as

adjustment to the opening balance of retained earnings and not in profit or loss.

Thus, the correcting entry is:

Correcting entry #1

Dec. 31	Retained earnings – XYZ, Inc. Extraordinary items *to adjust the opening balance of retained earnings for prior period error*	200	200

a.2: **Extraordinary items** – ***Impairment loss***

Additional information (a) above states that the remainder of the extraordinary items pertains to the decline in value of a plant that was damaged during the year. This amount should be recognized as impairment loss and not as extraordinary item.

Entry made (EM) – erroneous entry

20x1	Extraordinary items Accumulated impairment losses	200	200

'Should be' entry (SBE) – correct entry

20x1	Impairment loss Accumulated impairment losses	200	200

Correcting entry #2

Dec. 31	Impairment loss Extraordinary items *to reclassify the erroneous debit to extraordinary items*	200	200

b. & c.: ***Fair value adjustments***

Fair value of net assets (after adjustment for research cost)			4,000
Carrying amount of net assets (after adjustment for research cost):			
Share capital		200	
Share premium		400	
Retained earnings – unadjusted	2,400		
Prior period adjustment	(200)		
Retained earnings – adjusted		*2,200*	(2,800)
Fair value adjustment (in drams)			*1,200*
Divide by:			5

Annual depreciation of FVA (in drams)	***240***

d. Inter-company inventory transaction

	Downstream
Sale price (in pesos)	60
Cost of sales (P60M x 80%)	(48)
Gross profit	1 2
Ending inventory	50%
Unrealized gross profit (in pesos)	***6***

Additional information (d) above states that a foreign exchange difference remains in current liabilities. This is analyzed as follows:

XYZ's books

Sept. 1	Raw materials inventory (P60M x AMD6) Accounts payable *to record purchase of inventory from parent*	360	360

Entry made (EM) – erroneous entry

Sept. 21	Accounts payable Cash in bank (P60M x AMD6.5) *to record payment of accounts payable to parent*	390	390

'Should be' entry (SBE) – correct entry

Sept. 21	Accounts payable FOREX loss Cash in bank (P60M x AMD6.5) *to record payment of accounts payable to parent*	360 30	 390

Correcting entry #3

Dec. 31	FOREX loss Accounts payable	30	 30

e. Inter-company loan transaction

The loan payable was recorded at the exchange rate as of January 1 and no adjustment has yet been made as of year-end for the change in exchange rate.

The year-end adjustment is determined as follows:

Loan payable at opening rate (P100M x AMD5)	500
Loan payable at closing rate (P100M x AMD8)	800
Increase in loan payable - FOREX loss	***(300)***

Adjusting entry #4

Dec. 31	FOREX loss	300	
	Loan payable		300

Additional information (e) above states that ABC Co. has recorded the loan receivable in current assets while XYZ, Inc. has recorded the loan payable in noncurrent liabilities. This provides evidence that the settlement of the loan is neither planned nor likely to occur in the foreseeable future. Therefore, ***the loan shall form part of ABC's net investment in XYZ***.

Accordingly, the FOREX loss of AMD300 shall be recognized in profit or loss in XYZ's separate financial statements but recognized in ***other comprehensive income*** in the ***consolidated financial statements***.

f. Inter-company dividends

Since the dividends were declared and settled on the same date, no foreign exchange difference shall arise from the transaction.

The dividends paid by XYZ, Inc. are allocated to the owners of the parent and to NCI as follows:

	(in drams)	*(in pesos)* AMD8:P 1
Dividends declared by XYZ, Inc. (in drams)	1,600	200
Allocation:		
Dividends to ABC Co. (60%)	960	120
Dividends to NCI (40%)	640	80

2. Analysis of net assets

Table 1 **XYZ, Inc.**	***Acquisi-tion date***	***Consoli-dation date***	***Net change***
Share capital	200	200	
Share premium	400	400	
Retained earnings (net of prior period error)	2,200	4,000	
Total at carrying amounts	2,800	4,600	

Fair value adjustments at acquisition date	1,200	1,200	
Subsequent depreciation/ amortization of fair value adjustments	NIL	(240)	
Unrealized profits (Upstream only)	NIL	-	
FOREX loss on trade payable	-	(30)	
Subsidiary's net assets at fair value	*4,000*	*5,530*	***1,530***
FOREX loss on loan payable		(300)	(300)
Subsidiary's net assets at fair value	***4,000***	***5,230***	*1,230*

The FOREX loss on the loan payable is segregated from the other adjustments because this item is presented in the consolidated financial statements as part of ***other comprehensive income*** and therefore should ***not*** affect consolidated retained earnings. When computing for the consolidated retained earnings, the net change of "P1,530" will be used (see 'Step 5').

3. Computation of goodwill

Consideration transferred (P880 x 5)	4,400
Non-controlling interest in the acquiree	1,600
Previously held equity interest in the acquiree	-
Total	6,000
Fair value of net identifiable assets acquired *(see Table 1)*	(4,000)
Goodwill (in drams)	***2,000***
Divide by: Closing rate	8
Goodwill (in pesos) - Dec. 31	***250***

4. NCI in net assets

Subsidiary's net assets at fair value – Dec. 31 *(see Table 1)*	5,230
Multiply by: NCI percentage	40%
Total	*2,092*
Add: Goodwill to NCI *net* of accumulated impairment losses	-
Non-controlling interest in net assets (in drams)	***2,092***
Divide by: Closing rate	8
NCI in net assets (in pesos) - Dec. 31	***262***

5. Consolidated retained earnings

Parent's retained earnings in current year-end (in pesos)	3,480

Consolidation adjustments:		
Parent's share in the ***net change*** in subsidiary's net assets [a]	13 2	
Unrealized profits (Downstream only)	(6)	
Gain or loss on extinguishment of bonds	-	
Impairment loss on goodwill attributable to Parent	-	
Net consolidation adjustments		12 6
Total		3,606
Prior period adjustment of subsidiary [b]		18
Consolidated retained earnings		***3,622***

[a] Change in XYZ's net assets *(see Table 1)*	1,530
Multiply by: Controlling interest	60%
ABC's share in the change in XYZ's net assets – (in drams)	918
Divide by: ***Average exchange rate***	7
ABC's share in the change in XYZ's net assets – (in pesos)	**132**

[b] (200M research costs ÷ 7 ***average rate***) x 60% = ***18*** (rounded-off) – *see discussion in 'Step 1 – a.1'*

The prior period adjustment is added back because the parent shall only share in the net change in subsidiary's net assets starting on the date of acquisition. The parent shall not share in the changes in the subsidiary's net assets prior to the date of acquisition.

6. Translation gain (loss)

			Share in translation difference	
			ABC Co. (60%)	***XYZ, Inc. (40%)***
1) Translation of XYZ's net assets				
Net assets of sub., Jan. 1 - at opening rate	(4M ÷ 5)	800		
Net assets of sub., Jan. 1 - at closing rate	(4M ÷ 8)	500		
Decrease in net assets - FOREX loss		*(300)*	(180)	(120)
2) Translation of goodwill				
Goodwill, Dec. 31 - at opening rate	(2,000 ÷ 5)	400		

Goodwill, Dec. 31 - at closing rate	(2,000 ÷ 8)	250		
Decrease in goodwill - FOREX loss		*(150)*	**(150)**	-
3) Translation of XYZ's profit				
Profit of subsidiary at average rate[a]	(3,130 ÷ 7)	448		
Profit of sub at closing rate[a]	(3,130 ÷ 8)	392		
Decrease in profit - FOREX loss		(56)	***(34)***	(22)
4) FOREX on loan payable	(300M ÷ 7)	(41)	***(26)***	*(18)*
5) Translation of FOREX on loan payable	(300M ÷ 7)	(43)		
	(300M ÷ 8)	(38)		
		6	***4***	***2***
Total FOREX translation loss – OCI		***(544)***	***(386)***	***(158)***

Notice that the total translation adjustment to goodwill is attributed only to ABC. This is because goodwill is measured at "proportionate share," and therefore there is no goodwill to NCI.

The FOREX on loan payable is re-translated (see 5) from average rate to closing rate because the FOREX was not included in profit but rather in OCI.

[a] Profit for consolidation is computed as follows:

Profit for the year before adjustments (in drams)	3,200
Research costs (Correcting entry #1)	200
FOREX loss on trade payable (Correcting entry #3)	(30)
Total depreciation of FVA	(240)
Profit for consolidation (in drams)	***3,130***

Correcting entry #2 does not affect the reported profit because it is just a reclassification entry (i.e., from extraordinary item to impairment loss).

The FOREX loss on the loan payable is ***not*** included in the computation of profit above because it will be presented in ***other comprehensive income*** in the consolidated financial statements.

7. Consolidated profit

ABC	***XYZ, Inc. (in drams)***	***Rate***	***XYZ, Inc. (in pesos)***	***Consolidated***

	Co.				
Profit before adjustment	1,400	32600	7	458	1,858
Adjustments and corrections:					
Research costs		200	7	28	28
FOREX loss on trade payable		(30)	7	(4)	(4)
Adjusted profit	*1,400*	*3,370*	7	482	1,882
Consolidation adjustments:					
Unrealized profits	(6)	-		-	(6)
Dividend income	(120)	N/A		N/A	(120)
Net consolidation adjustments	(126)	-		-	(126)
Profits before FVA	***1,274***	*3,370*	7	***482***	1,756
Depreciation of fair values	(20)	(96)	7	(14)	(34)
Impairment loss on goodwill	-	-		-	
Consolidated profit or loss	*1,254*	*3,274*	7	*468*	***1,722***
Other comprehensive income:					
Gain or loss on translation of foreign operation *(see 'Step 6')*					(544)
Consolidated comprehensive income	1,254	3,274		468	***1,178***

8. Profit or loss and Comprehensive income attributable to owners of parent and to NCI

	Owners of parent	***NCI***	***Consolidated***
Parent's profit before FVA	1,274	N/A	1,274
Share in the subsidiary's profit before FVA	288	192	482
Depreciation/amortization of fair values	(20)	(14)	(34)

Share in impairment loss on goodwill	-	-	-
Profit attributable to	***1,542***	***180***	***1,722***
Share in translation loss *(see 'Step 6')*	(386)	(158)	(544)
Comprehensive income attributable to	***1,156***	***22***	***1,178***

The ***consolidation working papers*** are prepared as follows:

Consolidated statement of financial position
As of December 31, 20x1

	ABC Co. P*m*	**XYZ, INc.** ADM*m*	*Correc -tions & adjust-ments*	***XYZ, (adjusted)*** ADM*m*	***Closin g rate***	***XYZ, Inc. (trans-lated)*** *Pm*	*Conso-lidation adjust-ments*	***Con-solidated***
Current assets	4,000	4,400		4,400	8	550	(106) [d]	4,444
Investment in subsidiary	880						(880) [e]	-
Property, plant and equipment	6,000	3,600		3,600	8	450	120 [f]	6,570
Goodwill							250 [g]	250
TOTAL ASSETS	***10,880***	***8,000***		***8,000***		***1,000***		***11,264***
Current liabilities	2,000	2,000	30 [a]	2,030	8	254		2,254
Noncurrent liabilities	2,400	1,400	300 [b]	1,700	8	212	(100) [h]	2,512
Total liabilities	*4,400*	*3,400*		*3,730*		*466*		*4,766*
Share capital	2,000	200		200	8	26		2,000
Share premium	1,000	400		400	8	50		1,000
Retained earnings	3,480	4,000	(330) [c]	3,670	8	458		3,622
Translation loss on foreign operation							(386) [i]	(386)
NCI							262 [j]	262
Total equity	6,480	4,600		4,270		534		6,498
TOTAL LIABILITIES AND EQUITY	***10,880***	***8,000***		***8,000***		***1,000***		***11,264***

Corrections and Adjustments

[a] FOREX translation on accounts payable *(see 'Step 1.d' – Correcting entry #3)*

[b] FOREX translation on loan payable *(see 'Step 1.e – Adjusting entry #4)*

[c] Sum of corrections (a) and (b).

Consolidation adjustments

[d] 100 inter-company loan receivable *plus* 6 unrealized profit in ending inventory.

[e] Elimination of investment in subsidiary.

[f] Fair value adjustment, net of depreciation [(1,200 – 240) ÷ 8 closing rate] = ***120*** – *(see 'Step 1.b&c')*

[g] Recognition of goodwill – *(see 'Step 3')*

[h] Elimination of inter-company loan payable *(see 'Step 1.e)*

[I] Recognition of translation difference – *(see 'Step 6')*

[j] Recognition of NCI in net assets – *(see 'Step 4')*

Consolidated statement of profit or loss and other comprehensive income
For the year ended December 31, 20x1

	ABC Co. Pm	***XYZ, Inc.***	*Corrections &*	***XYZ, Inc. (adjusted)***	***Averag e rate***	***XYZ, Inc. (translated)***	*Consolidation adjustments*	***Consolidated***
Revenue	8,000	16,000		16,000	7	2,286	(60) [e]	10,226
Cost of sales	(5,000)	(8,000)		(8,000)	7	(1,142)	(54) [f]	(6,088)
Gross profit	*3,000*	*8,000*		*8,000*		*1,142*		*4,136*
Operating expenses	(1,000)	(2,000)		(2,000)	7	(286)	(34) [g]	(1,320)
Dividends received	120						(120) [h]	-
Interest expense	(200)	(600)		(600)	7	(86)		(286)
Interest income	80	200		200	7	28		108
Impairment loss			(200) [a]	(200)	7	(28)		(28)
FOREX loss			(30) [b]	(30)	7	(4)		(4)
Profit before tax	*2,000*	*5,600*		*5,370*		*768*		*2,606*
Income tax expense	(600)	(2,000)		(2,000)	7	(286)		(886)
Profit after tax	*1,400*	*3,600*		3,370		482		1,722
Extraordinary item		(400)	400 [c]	-		-		-
Profit for the year	*1,400*	*3,200*		*3,370*		*482*		***1,722***
Translation loss on foreign operation			(300) [d]	(300)	7	(42)	(502) [i]	(544)
Comprehensive income for the year	*1,400*	*3,200*		*3,070*		*438*		***1,178***

Corrections and Adjustments

[a] *(Correcting entry #2 – see 'Step 1.a2')*

[b] *(Correcting entry #3 – see 'Step 1.d')*

[c] *(Correcting entries #1 and #2 – see 'Steps 1.a1 and .a2)*

[d] *(Adjusting entry #4 – see 'Step 1.e')*

Consolidation adjustments

[e] Elimination of inter-company sale – *(see 'Step 1.d')*

[f] Inter-company sale of 60 *minus* Unrealized profit in ending inventory of 6 – *(see 'Step 1.d')*

[g] Depreciation of FVA (240 ÷ 7 average rate = 34 rounded-off) – *(see 'Step 1.b&c')*

[h] Elimination of inter-company dividends – *(see 'Step 1.f')*

[I] Total translation loss of 544 (*see 'Step 6'*) *minus* FOREX loss on loan payable of 42 already recognized in Adjusting entry #4(d).

Optional reconciliations:

Reconciliation for consolidated retained earnings

	Consolidated retained earnings		
		2,280	*Jan. 1, 20x1*
Dividends declared by Parent	200	1,542	P/L to owners of parent
Dec. 31, 20x1	***3,622***		

Reconciliation for NCI in net assets

	NCI in net assets		
		320	*Jan. 1, 20x1*
NCI in dividends (see 'Step 1.f')	80	22	Comprehensive income to NCI
Dec. 31, 20x1	***262***		

Consolidated total assets

Total assets of ABC Co.	10,880
Total assets of XYZ, Inc. (8,000 ÷ 8)	1,000
Investment in subsidiary	(880)
Fair value adjustments – net*	120
Goodwill – net *(see 'Step 3')*	250
Effect of inter-company transactions:	
Unrealized profit in ending inventory *(see 'Step 1.d')*	(6)
Inter-company loan receivable *(see 'Step 1.e')*	(100)
Consolidated total assets	***11,264***

*1,200 FVA *minus* 240 depreciation of FVA = 960 ÷ 8 closing rate = ***120***
(see 'Step 1.b&c')

Consolidated total liabilities	
Total liabilities of ABC Co.	4,400
Total liabilities of XYZ, Inc. (3,400 ÷ 8)	426
Fair value adjustments - net	-
Effect of inter-company transactions:	
FOREX loss included accounts payable *(see 'Step 1.d')*	4
Inter-company loan payable [a]	(62)
Consolidated total liabilities	***4,766***

[a](500M amount recorded, unadjusted ÷ 8 closing rate = 62)

Consolidated total equity	
Share capital of ABC Co.	2,000
Share premium of ABC Co.	1,000
Consolidated retained earnings *(see 'Step 5')*	3,622
Exchange differences on translation of foreign operation *(see 'Step 6')*	(386)
Equity attributable to owners of the parent	*6,238*
Non-controlling interests *(see 'Step 4')*	262
Consolidated total equity	***6,498***

20. *Solution:*

Fair value of consideration received	250,000
Carrying amount of NCI	41,200
Total	*291,200*
Less: Carrying amount of former subsidiary's net identifiable assets at derecognition date	(206,000)
Carrying amount of goodwill at derecognition date	(6,000)
Gain or loss on disposal of controlling interest	**79,200**
Reclassification adjustment for cumulative translation gain	1,600
Total gain recognized in profit or loss	**80,800**

Alternative solution using pro-forma entries:

Jan. 1,	Cash – ABC Co. *(FV of consideration received)*	250,000	

20x2	Non-controlling interest	41,200	
	Net identifiable assets		206,000
	Goodwill		6,000
	Gain on disposal of controlling interest (squeeze)		***79,200***
	to record the disposal of investment in XYZ, Inc.		

Jan. 1, 20x2	Cumulative exchange difference	1,600	
	Gain on translation *(to profit or loss)*		***1,600***
	to record the reclassification adjustment for translation difference		

Total gain recognized in profit or loss is ***P80,800*** (79,200 + 1,600).

21. *Solution:*
The financial statements of XYZ, Inc. are restated under PAS 29 as follows:

Statement of financial position
As of December 31, 20x1

	Historical	*Fraction*	*Restated (in current AOA)*	*Closing rate*	*Translated (in Pesos)*
Cash	92,000	N/A	92,000	0.50	46,000
Accounts receivable	148,000	N/A	148,000	0.50	74,000
Inventory	80,000	140/125	89,600	0.50	44,800
Building	200,000	140/100	280,000	0.50	140,000
Accumulated depreciation	(40,000)	140/100	(56,000)	0.50	(28,000)
Total assets	***480,000***		***553,600***		***276,800***
	-				-
Loan payable	60,000	N/A	60,000	0.50	30,000
Share capital	200,000	140/100	280,000	0.50	140,000
Retained earnings	220,000	*(squeeze)*	***213,600***	0.50	106,800
Total equity	*420,000*		*493,600*		*246,800*
Total liabilities and equity	***480,000***		***553,600***		***276,800***

Statement of profit or loss
For the year ended December 31, 20x1

	Historical		*Fraction*	*Restated (in current AOA)*		*Closing rate*	*Translated (in Pesos)*
Sales		240,000	140/125		268,800	0.50	134,400
Cost of sales:							
Invty. - Jan. 1	120,000		140/110	152,728			
Purchases	60,000		140/125	67,200			
TGAS	*180,000*			*219,928*			
Invty. - Dec. 31	(80,000)	(100,000)	140/125	(89,600)	(130,328)	0.50	(65,164)
Gross profit		*140,000*			*138,472*	0.50	69,236
Depreciation		(20,000)	140/100		(28,000)	0.50	(14,000)
Other optg. exp.		(80,000)	140/125		(89,600)	0.50	(44,800)
Loss on net monetary position*					(25,334)	0.50	(12,666)
Profit (loss) for the year		***40,000***			***(4,460)***		***(2,230)***

*Loss on net monetary position is computed as follows:

Net monetary items (monetary assets *less* monetary liabilities), end. – ***Historical*** (92K + 148K - 60K)		180,000
Less: Net monetary items, end. – ***Restated:***		
Net monetary assets - Jan. 1 *(restated)* (80,000 *given* x 140/120)	93,334	
Changes in net monetary items during the year:		
Sales *(restated)*	268,800	
Purchases *(restated)*	(67,200)	
Other operating expenses *(restated)*	(89,600)	205,334
Loss on net monetary position		***(25,334)***

Chapter 22 – Accounting for Derivatives and Hedging Transactions (Part 1)

Multiple Choice – Theory

1.	C	11.	C	21.	C
2.	A	12.	B	22.	D
3.	D	13.	A	23.	B
4.	C	14.	D	24.	C
5.	D	15.	B	25.	C
6.	C	16.	A	26.	B
7.	A	17.	D	27.	A
8.	D	18.	C	28.	D
9.	D	19.	D	29.	B
10.	C	20.	B	30.	D

Exercises

1. *Answers:*
Case #1: The option is ***out of the money***.
Case #2: The option is ***in the money***. You will gain P24.50 in exercising the option.

2. *Answers:*
Case #1: The option is *out of the money.*
Case #2: The option is *in the money*. You will gain P2,000 in exercising the option.

Chapter 23 – Accounting for Derivatives and Hedging Transactions (Part 2)

Multiple Choice – Theory

1.	D	11.	A	21.	B
2.	A	12.	E	22.	B
3.	A	13.	D	23.	B
4.	D	14.	A	24.	B
5.	A	15.	A	25.	C
6.	C	16.	B	26.	D
7.	B	17.	D	27.	A
8.	C	18.	A		
9.	C	19.	B		
10.	B	20.	D		

Multiple Choice – Computational

Answers at a glance:

1.	D	11.	D	21.	C	31.	A	41.	A	51.	A
2.	A	12.	C	22.	C	32.	C	42.	B	52.	C
3.	D	13.	A	23.	D	33.	D	43.	C	53.	B
4.	D	14.	A	24.	D	34.	A	44.	D	54.	D
5.	B	15.	C	25.	B	35.	A	45.	D	55.	A
6.	C	16.	D	26.	C	36.	C	46.	D	56.	B
7.	A	17.	B	27.	A	37.	B	47.	A	57.	C
8.	B	18.	A	28.	A	38.	A	48.	D	58.	B
9.	D	19.	B	29.	B	39.	D	49.	D	59.	A
10.	D	20.	C	30.	C	40.	D	50.	C	60.	***E***
										61.	C
										62.	A
										63.	A
										64.	D

Solutions:

1. D

Solution:

Hedged item – Account receivable	***Hedging instrument – Forward contract (Derivative)***
Dec. 15, 20x1	***Dec. 15, 20x1***
Accounts receivable……1.92M (4M yens x 0.48 spot rate) Sales……..1.92M	No entry

2. A

Solution:

Hedged item – Account receivable	***Hedging instrument – Forward contract (Derivative)***
Dec. 31, 20x1	***Dec. 31, 20x1***
Accounts receivable……40K [(0.49 - 0.48) x 4M] FOREX gain……...40K	Loss on forward contract….60K Forward contract (liability)...60K [(0.485 - 0.47) x 4M]
to adjust accounts receivable for the increase in spot rate	*to record the value of the derivative*

3. D (See entries above)

4. D (See entries above)

5. B

Solution:

Hedged item – Account receivable	***Hedging instrument – Forward contract (Derivative)***
Jan. 15, 20x2	***Jan. 15, 20x2***
Cash – foreign currency…1.84M (4M x 0.46 current spot rate) FOREX loss……...120K Accounts receivable……...1.96M (1.92M + 40K)	Cash – local currency……1.88M (4M x 0.47 agreed rate) Forward contract (liability)….60K Cash – foreign currency…1.84M Gain on forward contract ...100K
to record the receipt of 1M yens from the customer	*to record the remittance of 4M yens to the bank in exchange for the pre-agreed sale price of ₱1,880,000*

6. C (See entries above)

7. A (1.88M debit to cash – 1.84 credit to cash) = ***40,000 net cash receipt*** (See entry above)

8. B *20x1:* (40,000 gain – 60,000 loss) - *20x2:* (120,000 loss – 100,000 gain) = ***40,000 net loss*** (See entries above)

9. D
Solution:

Hedged item – None	***Forward contract (Derivative)***
	Dec. 15, 20x1 No entry

10. D
Solution:

Hedged item – None	***Forward contract (Derivative)***
	Dec. 31, 20x1 Loss on forward contract…..60K Forward contract (liability)....60K [(0.485 - 0.47) x 4M] *to record the value of the derivative*

11. D (See entry above)

12. C
Solution:

Hedged item – None	***Forward contract (Derivative)***
	Jan. 15, 20x2 Cash – local currency……1.88M (4M x 0.47 agreed rate) Forward contract (liability). 60K Cash – foreign currency. 1.84M Gain on forward contract…100K *to record the remittance of 4M yens to the bank in exchange for the pre-agreed sale price of ₱1,880,000*

13. A (1.88M debit to cash – 1.84 credit to cash) = ***40,000 net cash receipt*** (See entry above)

14. A
Solution:

Hedged item – Account payable	***Hedging instrument – Forward contract (Derivative)***
Dec. 15, 20x1 Inventory……48,000 (40K wons x 1.20 spot rate) Accounts payable…48,000	***Dec. 15, 20x1*** No entry

15. C
Solution:

Hedged item – Account payable	***Hedging instrument – Forward contract (Derivative)***
Dec. 31, 20x1	***Dec. 31, 20x1***
FOREX loss…… 2,400 [40K x (1.26 – 1.20)]	Forward contract (asset).. 1,200
Accounts payable…. 2,400	Gain on forward contract.. 1,200 [(1.27 forward rate – 1.24 forward rate) x 40K]

16. D

17. B
Solution:

Hedged item – Account payable	***Hedging instrument – Forward contract (Derivative)***
Jan. 15, 20x2	***Jan. 15, 20x2***
Accounts payable…….50,400 (48K + 2.4K)	Cash - foreign currency...52,000 (40K x 1.30)
FOREX loss…… 1,600 [(1.30 -1.26) x 40K]	Cash - local currency……..49,600
Cash - foreign currency……52,000	Forward contract (asset)… 1,200
	Gain on forward contract.....1,200 [(1.30 – 1.27) x 40K]
to record the payment of 40,000 wons to the supplier	*to record the purchase of 40,000 wons from the bank at the pre-agreed purchase price of ₱49,600*

18. A (See entries above)

19. B (1,600 loss – 1,200 gain) = ***400 net loss*** (See entries above)

20. C (52,000 debit to cash – 49,600 credit to cash) = ***2,400 net cash receipt*** (See entries above)

21. C
Solutions:

Hedged item – None	***Forward contract (Derivative)***
	Dec. 15, 20x1 No entry
	Dec. 31, 20x1 Forward contract (asset).. 1,200 Gain on forward contract.. 1,200 [(1.27 forward rate – 1.24 forward rate) x 40K]

	Jan. 15, 20x2 Cash - foreign currency.. .52,000 (40K x 1.30) Cash - local currency……..49,600 Forward contract (asset)… 1,200 Gain on forward contract.... 1,200 [(1.30 – 1.27) x 40K]

22. C (See entries above)

23. D
Solution:

Hedged item – Firm sale commitment	***Hedging instrument – Forward contract (Derivative)***
Dec. 15, 20x1 No entry	***Dec. 15, 20x1*** No entry

24. D
Solution:

Hedged item – Firm sale commitment	***Hedging instrument – Forward contract (Derivative)***
Dec. 31, 20x1 Firm commitment (asset)..60K Gain on firm commitment……60K *to recognize the change in the fair value of the firm commitment*	***Dec. 31, 20x1*** Loss on forward contract..60K Forward contract (liability)..60K [(0.485 – 0.47) x 4M yens *to recognize the change in the fair value of the forward contract*

25. B (See entry above)

26. C (60,000 loss ÷ 60,000 gain) = ***100%***

27. A
Solution:

Hedged item – Firm sale commitment	***Hedging instrument – Forward contract (Derivative)***
Jan. 15, 20x2 Cash (foreign currency)… 1.84M (4M yens x 0.46 spot rate) Loss on firm commitment...100K Sales…… 1.88M (4M yens x 0.47 forward rate) Firm commitment (asset).. 60K *to record the actual sale transaction, to recognize the change in the fair value of the firm commitment, and to derecognize the firm commitment*	***Jan. 15, 20x2*** Cash (local currency)…....1.88M Forward contract (liability)… 60K Gain on forward contract…100K Cash (foreign currency)….1.84M *to record the remittance of 4M yens to the bank in exchange for the pre-agreed sale price of ₱1,880,000*

28. A (1,880,000 debit to cash – 1,840,000 credit to cash) = ***40,000 net cash receipt*** (See entries above)

29. B

Solution:

Hedged item – Firm purchase commitment	***Hedging instrument – Forward contract (Derivative)***
Dec. 15, 20x1	***Dec. 15, 20x1***
No entry	No entry

Hedged item – Firm purchase commitment	***Hedging instrument – Forward contract (Derivative)***
Dec. 31, 20x1	***Dec. 31, 20x1***
Loss on firm commitment .. 1,200	Forward contract (asset)… 1,200
Firm commitment (liability).. 1,200	[(1.27 – 1.24) x 40K yens
	Gain on forward contract… 1,200
to recognize the change in the fair value of the firm commitment	*to recognize the change in the fair value of the forward contract*

30. C (See entry above)

31. A

Solution:

Hedged item – Firm purchase commitment	***Hedging instrument – Forward contract (Derivative)***
Jan. 15, 20x2	***Jan. 15, 20x2***
Inventory……..49.6K	Cash (foreign currency)…...52K
(40K wons x 1.24 forward rate)	Gain on forward contract.. 1.2K
Loss on firm commitment... 1.2K	Forward contract (asset)… 1.2K
Firm commitment (liability).. 1.2K	Cash (local currency)…. 49.6K
Cash (foreign currency)……52K	
(40K wons x 1.30 spot rate)	
to record the payment of 40,000 wons to the supplier	*to record the purchase of 40,000 wons from the bank at the pre-agreed purchase price of ₱49,600*

32. C (52,000 debit to cash – 49,600 credit to cash) = ***2,400 net cash receipt*** (See entries above)

33. D

Solution:

Hedged item – Firm purchase commitment	***Hedging instrument – Forward contract (Derivative)***
Oct. 1, 20x1	***Oct. 1, 20x1***
No entry	No entry

34. A

Solution:

Hedged item – Firm purchase commitment	***Hedging instrument – Forward contract (Derivative)***
Dec. 31, 20x1	***Dec. 31, 20x1***
Loss on firm commitment ..27,727	Forward contract (asset)..27,727
Firm commitment (liability).. 27,727	Gain on forward contract 27,727
to recognize the change in the fair value of the firm commitment	*to recognize the change in the fair value of the forward contract*

35. A (See entries above)

36. C

Solution:

Hedged item – Firm purchase commitment	***Hedging instrument – Forward contract (Derivative)***
Mar. 31, 20x2	***Mar. 31, 20x2***
Inventory (147 x 1,000).588,000	Cash [(160 - 147) x 4,000]...52,000
Loss on firm commitment (52,000 – 27,727)…… 24,273	Gain on forward contract (52,000 – 27,727). 24,273
Firm commitment (liability)……...27,727	Forward contract (asset)…27,727
Cash ……640,000 (160 fixed contract price x 4,000)	
to record the actual purchase transaction, to recognize the change in the fair value of the firm commitment, and to derecognize the firm commitment	*to recognize the change in forward rates during the period and to record the **net cash** settlement of the forward contract.*

37. B (See entries above)

38. A (See entries above)

39. D

Solutions:

Hedged item – Firm purchase commitment	***Hedging instrument – Forward contract (Derivative)***
Oct. 1, 20x1	***Oct. 1, 20x1***
No entry	No entry
Dec. 31, 20x1	***Dec. 31, 20x1***
Loss on firm commitment 39,608	Forward contract (asset) 39,608
Firm commitment (liability). 39,608	Gain on forward contract. 39,608
to recognize the change in the fair value of the firm commitment	*to recognize the change in the fair value of the forward contract*

Mar. 31, 20x2 Inventory (50 x 4,000) 200,000 Firm commitment (liability)……..39,608 Cash…… 160,000 Gain on firm commitment…… 79,608 [40,000 *minus* (*negative* 39,608)] *to record the actual purchase transaction, to recognize the change in the fair value of the firm commitment, and to derecognize the firm commitment*	***Mar. 31, 20x2*** Loss on forward contract..79,608 [40,000 *minus* (*negative* 39,608)] Forward contract (asset)…39,908 Cash…… 40,000 [(50 – 40) x 4,000] *to recognize the change in forward rates during the period and to record the **net cash** settlement of the forward contract.*

40. D (See entries above)

41. A (See entries above)

42. B (See entries above)

43. C (See entries above)

44. D (See entries above)

45. D

Solution:

Hedged item – Highly probable forecast transaction	***Hedging instrument – Forward contract (Derivative)***
Dec. 15, 20x1 No entry	***Dec. 15, 20x1*** No entry

46. D (See entries above)

47. A

Solution:

Hedged item – Highly probable forecast transaction	***Hedging instrument – Forward contract (Derivative)***
Dec. 31, 20x1 No entry	***Dec. 31, 20x1*** Forward contract (asset)… 40K [(55 –45) x 4,000 Accumulated OCI… ……. 40K *to recognize the change in the fair value of the forward contract*

48. D (See entries above)

49. D (See entries above)

50. C
Solution:

Hedged item – Highly probable forecast transaction	***Hedging instrument – Forward contract (Derivative)***
Jan. 15, 20x2 Inventory……240K (4,000 x 60 current spot rate) Cash (foreign currency)….240K *to record the actual purchase transaction*	***Jan. 15, 20x2*** Forward contract (asset)… 20K [(60 –55) x 4,000 Accumulated OCI… ……. 20K *to recognize the change in the fair value of the forward contract*
	Jan. 15, 20x2 Cash [(60 – 45) x 4,000]…. 60K Forward contract (asset)…60K *to record the **net** settlement of the forward contract.*

51. A (See entries above)

52. C
Solution:

Feb. 14, 20x2	***Feb. 14, 20x2***
Cash……1.44M Cost of goods sold……400K Inventory……400K Sales……1.44M *to record the sale of inventory*	Accumulated OCI… ……. 60K (40K + 20K) Cost of goods sold……..60K *to reclassify accumulated gains on forward contract to profit or loss as a **reduction to cost of goods sold**.*

Net cost of goods sold = 400,000 debit – 60,000 credit = ***340,000***

53. B
Solutions:
The fair values of the forward contract are determined as follows:

Date	***Translation using forward rates***	***Cumulative changes since inception date***
10/1/0x1	(DOM 59.400M ÷ 140) = ₱424,286	-
12/31/x1	(DOM 59.400M ÷ 142) = ₱418,310	(418,310 – 424,286) = 5,976
4/1/x2	(DOM 59.400M ÷ 144) = ₱412,500	(412,500 – 424,286) = 11,786

Date	***Cumulative changes***	**PV of 1***	**PV factors**	***Fair value of forward contract - asset (liability)***	***Changes in fair values – gain (loss)***

10/1/0x1	-			-	-
12/31/x1	5,976	@ .5% n=3	0.98515	5,887	5,887
4/1/x2	11,786	@ .5% n=0	1	11,786	5,899

* (6% ÷ 12 months = .5% per month); n= 3 is three months, Dec. 31 to Apr. 1

The measurements resulted to *assets* and *gains* because the forward prices were ₱418,310 and ₱412,500 on December 31 and April 1, respectively, but ABC Co. can sell at a *higher price* of ₱424,286. These conditions are ***favorable*** to ABC.

54. D – ***None****, the actual sale have not yet taken place.*

55. A

Solutions:

Hedged item – Highly probable forecast transaction	***Hedging instrument – Forward contract (Derivative)***
Oct. 1, 20x1 No entry	***Oct. 1, 20x1*** No entry
Dec. 31, 20x1 No entry	***Dec. 31, 20x1*** Forward contract (asset).. 5,887 Accumulated OCI… ……. 5,887 *to recognize the change in the fair value of the forward contract*
April 1, 20x2 Accounts receivable..412,500 Sales……412,500 (59.4M ÷ 144 spot rate) *to record the actual sale transaction*	***April 1, 20x2*** Forward contract (asset)..5,899 Accumulated OCI… ……. 5,899 *to recognize the change in the fair value of the forward contract*
April 1, 20x2 Accumulated OCI……. 11,786 (5,887 + 5,899) Sales……...11,786 *to **reclassify** the gain accumulated in OCI to profit or loss.*	***April 1, 20x2*** Cash (5,887 + 5,899)……11,786 Forward contract (asset)…11,786 *to record the **net** settlement of the forward contract.*

Sales at ***current*** spot rate (59.4M ÷ 144)	412,500
Reclassification of accumulated OCI to P/L	11,786
Total sales	***424,286***

56. B (See entries above)

57. C (See entries above)

58. B
Solution:

Hedged item – Account payable	***Hedging instrument – Forward contract (Derivative)***
Dec. 15, 20x1	***Dec. 15, 20x1***
Inventory……480,000 (400K wons x 1.20 spot rate) Accounts payable…480,000	No entry

59. A
Solution:
The amortization table is prepared as follows:

	Interest expense a = b x 1.6530%	***Discount***	***Present value b = prev. bal. + a***
Dec. 1, 20x1		IGNORED	480,000*
Dec. 31, 20x1	7,934		487,934
Jan. 31, 20x2	8,066		496,000
Total	*16,000*		

*400,000 notional amount x 1.20 spot rate

The fair values of the forward contract are computed as follows:

		Fair value of forward contract	***Change in fair values***
Dec. 1, 20x1		-	
Dec. 31, 20x1:	(1.27 - 1.24) x 400,000 x .99502	11,940	11,940
Jan. 31, 20x2:	(1.30 - 1.24) x 400,000 x 1	24,000	12,060

Hedged item – Account payable	***Hedging instrument – Forward contract (Derivative)***
Dec. 31, 20x1	***Dec. 31, 20x1***
FOREX loss…… 12,000 [400K x (1.23 – 1.20)] Accounts payable… 12,000	Interest expense…….. 7,934 Forward contract (asset)...11,904 Accumulated OCI ……19,838
to recognize FOREX loss on the increase in exchange rates.	*to recognize the change in the fair value of the derivative and to record the effective portion in OCI, taking into account the interest expense implicit in the forward contract.*

	Dec. 31, 20x1 Accumulated OCI …12,000 Gain on forward contract 12,000 *to reclassify an amount out of OCI* ***to offset the transaction loss on the account payable.***

60. **E**
CORRECTION: Dear Sir/Ma'am: The correct answer was omitted from the answer choices. I am sorry for the error. The CORRECT ANSWER is ***19,838***. **(See entries above)**

61. C (See entries above)

62. A
Solutions:

Hedged item – Account payable	***Hedging instrument – Forward contract (Derivative)***
Jan. 31, 20x2 FOREX loss…… 28,000 [400K x (1.30 – 1.23)] Accounts payable….28,000 *to recognize FOREX loss on the increase in exchange rates.*	***Jan. 31, 20x2*** Interest expense…….. 8,066 Forward contract (asset)...12,060 Accumulated OCI ……20,126 *to recognize the change in the fair value of the derivative and to record the effective portion in OCI, taking into account the interest expense implicit in the forward contract.*
Accounts payable…520,000 Cash - foreign currency…520,000 *to record the settlement of the account payable*	Cash – foreign currency..520K Cash – local currency… 496K Forward contract…… 24K *to record the settlement of the forward contract.*
	Accumulated OCI …… 27,964 (19,838 – 12,000 + 20,126) Gain on forward contract 27,964 *to reclassify the remaining amount of accumulated OCI.*

63. A (See entries above)

64. D (520,000 debit – 496,000 credit) = ***24,000 net cash receipt***

Exercises
1. Solutions:
The entries on December 15, 20x1 are as follows:

Hedged item – Receivable	*Hedging instrument - Forward contract (Derivative)*
Dec. 15, 20x1	***Dec. 15, 20x1***
Accounts receivable……960K (2M yens x 0.48 spot rate) Sales……...960K	No entry

No entry is made for the forward contract because its value is zero.

The entries on December 31, 20x1 are as follows:

Hedged item – Receivable	*Hedging instrument - Forward contract (Derivative)*
Dec. 31, 20x1	***Dec. 31, 20x1***
Accounts receivable……20K [(0.49 - 0.48) x 2M] FOREX gain……...20K	Loss on forward contract….30K Forward contract (liability)...30K [(0.485 - 0.47) x 2M]
to adjust accounts receivable for the increase in spot exchange rate	*to record the value of the derivative, computed as the difference between the agreed selling price of P0.47 and the current forward rate of P0.485 multiplied by 2M yens.*

☞ Alternatively, the change in the fair value of the forward contract may be analyzed as follows:

Fair value, Dec. 31 [(.485 current forward rate - ***.47 initial forward rate***) x 2M]	(30,000)	liability
Less: Fair value, Dec. 15	0	
Loss on change in fair value	***(30,000)***	

Gross settlement

The entries on January 15, 20x2 are as follows:

Hedged item – Receivable	*Hedging instrument - Forward contract (Derivative)*
Jan. 15, 20x2	***Jan. 15, 20x2***
Cash – foreign currency…920K (2M x 0.46 current spot rate) FOREX loss……...60K Accounts receivable…….980K (960K + 20K)	Cash – local currency……940K (2M x 0.47 agreed rate) Forward contract (liability)..30K Cash – foreign currency…920K Gain on forward contract 50K
to recognize the FOREX loss on the change in currency rates during the period and to record the receipt of 2M yens from the customer	*to recognize the change in forward rates during the period and to record the settlement of the forward contract through the remittance of the 2M yens received from the customer to the bank in exchange for the agreed price of P940,000.*

Fair value, Jan. 15 [(.46 current forward rate - ***.47 initial forward rate***) x 2M]	20,000	asset
Less: Fair value, Dec. 31 [(.485 current forward rate - ***.47 initial forward rate***) x 2M]	(30,000)	liability
Gain on change in fair value	***50,000***	

Net settlement

Hedged item – Receivable	***Hedging instrument - Forward contract (Derivative)***
Jan. 15, 20x2 Cash – foreign currency…920K (2M x 0.46 current spot rate) FOREX loss……...60K Accounts receivable…….980K (960K + 20K) *to record the receipt of 2M yens from customer*	***Jan. 15, 20x2*** Cash – local currency…… **20K** [(0.47 – 0.46) x 2M] Forward contract (liability)..30K Gain on forward contract ....50K *to record the net cash settlement of the forward contract computed as the difference between the agreed forward rate of P0.47 and the current forward rate of 0.46 multiplied by the notional amount of 2M yens.*

2. Solution:

The entry on December 15, 20x1 is as follows:

Hedged item – None	***Forward contract (Derivative)***
	Dec. 15, 20x1 No entry

No entry is made for the forward contract because its value is zero.

The entry on December 31, 20x1 is as follows:

Hedged item – None	***Forward contract (Derivative)***
	Dec. 31, 20x1 Loss on forward contract…..30K Forward contract (liability)....30K [(0.485 - 0.47) x 2M] *to record the value of the derivative computed as the difference between the agreed selling price of P0.47 and the current forward rate of P0.485 multiplied by 2M yens.*

Gross settlement

Hedged item – None	***Forward contract (Derivative)***
	Jan. 15, 20x2 Cash – local currency……940K (2M x 0.47 agreed rate)

	Forward contract (liability).30K Cash – foreign currency…920K Gain on forward contract…..50K *to record the settlement of the forward contract through the remittance of the 2M yens to the bank in exchange for the agreed price of P940,000.*

Net settlement

Hedged item – None	***Forward contract (Derivative)***
	Jan. 15, 20x2 Cash – local currency…… **20K** [(0.47 – 0.46) x 2M] Forward contract (liability)..30K Gain on forward contract ....50K *to record the net cash settlement of the forward contract computed as the difference between the agreed forward rate of P0.47 and the current forward rate of 0.46 multiplied by the notional amount of 2M yens.*

3. Solution:

The entries on December 1, 20x1 are as follows:

Hedged item – Payable	***Hedging instrument – Forward contract (Derivative)***
Dec. 15, 20x1 Inventory…….24K (20K wons x 1.20 spot rate) Accounts payable……..24K	***Dec. 15, 20x1*** No entry

The entries on December 31, 20x1 are as follows:

Hedged item – Payable	***Hedging instrument – Forward contract (Derivative)***
Dec. 31, 20x1 FOREX loss…… 1.2K [20K x (1.26 – 1.20)] Accounts payable…. 1.2K	***Dec. 31, 20x1*** Forward contract (asset).. .6K Gain on forward contract.. . 6K [(1.27 forward rate – 1.24 forward rate) x 20K]

Fair value, Dec. 31 [(1.27 current forward rate - ***1.24 initial forward rate***) x 20K]	600	asset
Less: Fair value, Dec. 15	0	
Gain on change in fair value	***600***	

Gross settlement

The entries on January 15, 20x2 are as follows:

Hedged item – Payable	***Hedging instrument – Forward contract (Derivative)***
Jan. 15, 20x2 Accounts payable……25.2K (24K + 1.2K) FOREX loss…….. **.**8K [(1.30 -1.26) x 20K] Cash - foreign currency……26K	***Jan. 15, 20x2*** Cash - foreign currency.. .26K (20K x 1.30) Cash - local currency…….24.8K Forward contract (asset)… **.**6K Gain on forward contract.... **.**6K [(1.30 – 1.27) x 20K]

Fair value, Jan. 15 [(1.30 current forward rate - ***1.24 initial forward rate***) x 20K]	1,200	asset
Less: Fair value, Dec. 31 [(1.27 current forward rate - ***1.24 initial forward rate***) x 20K]	600	asset
Gain on change in fair value	***600***	

Net settlement

Hedged item – Receivable	***Hedging instrument - Forward contract (Derivative)***
Jan. 15, 20x2 Accounts payable……25.2K (24K + 1.2K) FOREX loss…….. **.**8K [(1.30 -1.26) x 20K] Cash - foreign currency……26K	***Jan. 15, 20x2*** Cash [(1.30 – 1.24) x 20K]….. **1.2K** Forward contract (asset)… **.**6K Gain on forward contract.... **.**6K [(1.30 – 1.27) x 20K]

4. Solution:

The entries are as follows:

Hedged item – None	***Forward contract (Derivative)***
	Dec. 15, 20x1 No entry
	Dec. 31, 20x1 Forward contract (asset).. **.**6K Gain on forward contract.. **.**6K [(1.27 forward rate – 1.24 forward rate) x 20K]

Gross settlement

	Jan. 15, 20x2 Cash - foreign currency.. .26K (20K x 1.30) Cash - local currency…….24.8K Forward contract (asset)… **.**6K Gain on forward contract.... **.**6K [(1.30 – 1.27) x 20K]

Net settlement

Hedged item – None	***Forward contract (Derivative)***
Jan. 15, 20x2	***Jan. 15, 20x2*** Cash [(1.30 – 1.24) x 20K]….. **1.2K** Forward contract (asset)… **.**6K Gain on forward contract.... **.**6K [(1.30 – 1.27) x 20K]

5. Solution:

The entries are as follows:

Hedged item – Firm sale commitment	***Hedging instrument - Forward contract (Derivative)***
Dec. 15, 20x1 No entry	***Dec. 15, 20x1*** No entry
Dec. 31, 20x1 Firm commitment (asset)..30K Gain on firm commitment……30K *to recognize the change in the fair value of the firm commitment*	***Dec. 31, 20x1*** Loss on forward contract..30K Forward contract (liability)..30K [(0.485 – 0.47) x 2M yens *to recognize the change in the fair value of the forward contract*

Gross settlement

Hedged item – Firm commitment	***Hedging instrument - Forward contract (Derivative)***
Jan. 15, 20x2 Cash (foreign currency)… 920K (2M yens x 0.46 spot rate) Loss on firm commitment...50K Sales……..940K (2M yens x 0.47 forward rate) Firm commitment (asset)..30K *to record the actual sale transaction, to recognize the change in the fair value of the firm commitment, and to derecognize the firm commitment*	***Jan. 15, 20x2*** Cash (local currency)…....940K Forward contract (liability)…30K Gain on forward contract……...50K Cash (foreign currency)….920K *to recognize the change in forward rates during the period and to record the settlement of the forward contract through the remittance of the 2M yens received from the customer to the bank in exchange for the agreed price of P940,000.*

Net settlement

Hedged item – Receivable	***Hedging instrument - Forward contract (Derivative)***
Jan. 15, 20x2 Cash (foreign currency)..920K (2M yens x 0.46 spot rate) Loss on firm commitment...50K	***Jan. 15, 20x2*** Cash (local currency)…..... ***20K*** Forward contract (liability)…30K

Sales……..940K (2M yens x 0.47 forward rate) Firm commitment (asset)..30K *to record the actual sale transaction, recognize the change in the fair value of the firm commitment, and to derecognize the firm commitment*	Gain on forward contract……...50K *to recognize the change in forward rates during the period and to record the **net cash** settlement of the forward contract.*

6. Solution:

The entries are as follows:

Hedged item – Firm purchase commitment	***Hedging instrument - Forward contract (Derivative)***
Dec. 15, 20x1 No entry	***Dec. 15, 20x1*** No entry
Dec. 31, 20x1 Loss on firm commitment .. **.**6K Firm commitment (liability).. **.**6K *to recognize the change in the fair value of the firm commitment*	***Dec. 31, 20x1*** Forward contract (asset)… **.**6K [(1.27 – 1.24) x 20K yens Gain on forward contract… **.**6K *to recognize the change in the fair value of the forward contract*

Gross settlement

Hedged item – Firm commitment	***Hedging instrument - Forward contract (Derivative)***
Jan. 15, 20x2 Inventory……..24.8K (20K wons x 1.24 forward rate) Loss on firm commitment... **.**6K Firm commitment (liability).. **.**6K Cash (foreign currency)……26K (20K wons x 1.30 spot rate) *to record the actual purchase transaction, to recognize the change in the fair value of the firm commitment, and to derecognize the firm commitment*	***Jan. 15, 20x2*** Cash (foreign currency)…...26K Gain on forward contract……... **.**6K Forward contract (asset)… **.**6K Cash (local currency)…. 24.8K *to recognize the change in forward rates during the period and to record the settlement of the forward contract through the purchase of 20,000 wons from the bank for the agreed purchase price of P24,800.*

Net settlement

Hedged item – Receivable	***Hedging instrument - Forward contract (Derivative)***
Jan. 15, 20x2 Inventory……..24.8K Loss on firm commitment... **.**6K Firm commitment (liability).. **.**6K	***Jan. 15, 20x2*** Cash ……..... ***1.2K*** Forward contract (asset)… **.**6K Gain on forward

Cash (foreign currency)……26K *to record the actual purchase transaction, recognize the change in the fair value of the firm commitment, and to derecognize the firm commitment*	contract…….. .6K *to recognize the change in forward rates during the period and to record the **net cash** settlement of the forward contract.*

7. Solution:

The entries are as follows:

Hedged item – Firm purchase commitment	***Hedging instrument - Forward contract (Derivative)***
Oct. 1, 20x1 No entry	***Oct. 1, 20x1*** No entry
Dec. 31, 20x1 Loss on firm commitment ..13,864 Firm commitment (liability).13,864 *to recognize the change in the fair value of the firm commitment*	***Dec. 31, 20x1*** Forward contract (asset)...13,864 Gain on forward contract..13,864 *to recognize the change in the fair value of the forward contract*
Mar. 31, 20x2 Inventory (147 x 2,000).294,000 Loss on firm commitment (26,000 – 13,864)…… 12,136 Firm commitment (liability)……...13,864 Cash ……..320,000 (160 fixed contract price x 2,000) *to record the actual purchase transaction, to recognize the change in the fair value of the firm commitment, and to derecognize the firm commitment*	***Mar. 31, 20x2*** Cash [(160 - 147) x 2,000]...26,000 Gain on forward contract (26,000 – 13,864). 12,136 Forward contract (asset).13,864 *to recognize the change in forward rates during the period and to record the **net cash** settlement of the forward contract.*

8. Solution:

The entries are as follows:

Hedged item – Firm purchase commitment	***Hedging instrument - Forward contract (Derivative)***
Oct. 1, 20x1 No entry	***Oct. 1, 20x1*** No entry
Dec. 31, 20x1 Loss on firm commitment . 19,804 Firm commitment (liability).19,804 *to recognize the change in the fair value of the firm commitment*	***Dec. 31, 20x1*** Forward contract (asset)…19,804 Gain on forward contract..19,804 *to recognize the change in the fair value of the forward contract*

Mar. 31, 20x2 Inventory (50 x 2,000)..100,000 Firm commitment (liability)……..19,804 Cash……..…80,000 Gain on firm commitment…… 39,804 [20,000 *minus* (*negative* 19,804)] *to record the actual purchase transaction, to recognize the change in the fair value of the firm commitment, and to derecognize the firm commitment*	***Mar. 31, 20x2*** Loss on forward contract..39,804 [(negative 20,000) *minus* 19,804] Forward contract (asset)…19,804 Cash……. 20,000 [(50 – 40) x 2,000] *to recognize the change in forward rates during the period and to record the **net cash** settlement of the forward contract.*

9. Solution:

The entries are as follows:

Hedged item – Highly probable forecast transaction	***Hedging instrument - Forward contract (Derivative)***
Dec. 15, 20x1 No entry	***Dec. 15, 20x1*** No entry
Dec. 31, 20x1 No entry (see previous explanation)	***Dec. 31, 20x1*** Forward contract (asset)… 20K [(55 –45) x 2,000 Accumulated OCI…..…… 20K *to recognize the change in the fair value of the forward contract*
Jan. 15, 20x2 Inventory……..120K (2,000 x 60 current spot rate) Cash (foreign currency)….120K *to record the actual purchase transaction*	***Jan. 15, 20x2*** Forward contract (asset)… 10K [(60 –55) x 2,000 Accumulated OCI… ……. 10K *to recognize the change in the fair value of the forward contract*
	Jan. 15, 20x2 Cash [(60 – 45) x 2,000]…. 30K Forward contract (asset)…30K *to record the **net** settlement of the forward contract.*

10. Solution:

The entries are as follows:

Hedged item – Highly probable forecast transaction	***Hedging instrument - Forward contract (Derivative)***

Oct. 1, 20x1	***Oct. 1, 20x1***
No entry	No entry

The fair values of the forward contract and gains/losses on changes in the fair values of the forward contract are determined as follows:

Date		***Change since inception date (Oct. 1, 20x1)***	***Multiply by PV factor***	***Fair value of forward contract***	***(Gain)/ Loss on forward contract***
10/1/0x1	(29.7M ÷ 140) = 212,142	-	-	-	-
12/31/x1	(29.7M ÷ 142) = 209,154	(2,988)	0.98514	(2,944)	(2,944)
4/1/x2	(29.7M ÷ 144) = 206,250	(5,892)	1	(5,892)	(2,950)

Hedged item – Highly probable forecast transaction	***Hedging instrument - Forward contract (Derivative)***
Dec. 31, 20x1 No entry	***Dec. 31, 20x1*** Forward contract (asset).. 2,944 Accumulated OCI… ……. 2,944 *to recognize the change in the fair value of the forward contract*
April 1, 20x2 Accounts receivable..206,250 Sales……206,250 (29.7M ÷ 144 spot rate) *to record the actual sale transaction*	***April 1, 20x2*** Forward contract (asset)..2,950 Accumulated OCI… ……. 2,950 *to recognize the change in the fair value of the forward contract*
April 1, 20x2 Accumulated OCI……. 5,894 (2,944 + 2,950) Sales……5,894 *to **reclassify** the amount relating to the hedged item that affected earnings from OCI to profit or loss.*	***April 1, 20x2*** Cash (2,944 + 2,950)……. 5,894 Forward contract (asset)…5,894 *to record the **net** settlement of the forward contract.*

11. Solution:

The amortization table is prepared as follows:

	Interest expense	***Present value***
	a = b x 1.6530%	***b = prev. bal. + a***

Dec. 1, 20x1		240,000
Dec. 31, 20x1	3,968	243,968
Jan. 31, 20x2	4,032	248,000
Total interest expense	*8,000*	

*100,000 notional amount x 2.40 spot rate

The following table shows the computations for the fair values of the forward contract:

	Fair value of forward contract	***Change***
Dec. 1, 20x1	-	
Dec. 31, 20x1: (1.27 - 1.24) x 200,000 x .99052	5,970	5,970
Jan. 31, 20x2: (1.30 - 1.24) x 200,000 x 1	12,000	6,030

The entries on December 1, 20x1 are as follows:

Hedged item – Payable	***Hedging instrument – Forward contract (Derivative)***
Dec. 1, 20x1 Inventory……240K (200K wons x 1.20 spot rate) Accounts payable……240K *to record the purchase of inventory.*	***Dec. 1, 20x1*** No entry
Dec. 31, 20x1 FOREX loss…… 6,000 [200K x (1.26 – 1.23)] Accounts payable…. 6,000 *to recognize foreign exchange loss due to increase in exchange rate.*	***Dec. 31, 20x1*** Interest expense…….. 3,968 Forward contract (asset)...5,970 Accumulated OCI …… 9,938 *to recognize change in fair value of derivative and record effective portion in other comprehensive income, taking into account interest expense implicit in the forward contract.*
	Dec. 31, 20x1 Accumulated OCI …….6,000 Gain on forward contract….6,000 *to reclassify an amount out of other comprehensive income to offset the transaction loss on the account payable.*
Jan. 31, 20x2 FOREX loss…… 14,000 [200K x (1.30 – 1.27)] Accounts payable….14,000	***Jan. 31, 20x2*** Interest expense…….. 4,032 Forward contract (asset)...6,030 Accumulated OCI ……10,062

to recognize foreign exchange loss due to increase in exchange rate.	*to recognize change in fair value of derivative and record effective portion in other comprehensive income, taking into account interest expense implicit in the forward contract.*
Accounts payable…260,000 Cash - foreign currency…260,000 *to record the settlement of the account payable*	Cash – foreign currency..260K Cash – local currency…… 248K Forward contract…… 12K (5,970 + 6,030) *to record the settlement of the forward contract.*
	Accumulated OCI …… 14,000 (9,938 – 6,000 + 10,062) Gain on forward contract...14,000 *to reclassify the remaining amount of accumulated OCI.*

Variation: Net settlement and Compound entries

Hedged item – Payable	***Hedging instrument – Forward contract (Derivative)***
Jan. 31, 20x2 Accounts payable…. 246,000 (240K + 6K) FOREX loss…… 14,000 [200K x (1.30 – 1.27)] Cash…….. 260,000	***Jan. 31, 20x2*** Interest expense…….. 4,032 Forward contract (asset)...6,030 Accumulated OCI ……10,062
	Cash…….. 12K Accumulated OCI ……...14K (9,938 – 6,000 + 10,062) Forward contract…… 12K (5,970 + 6,030) Gain on forward contract……14K *to record the **net settlement** of the forward contract and to **reclassify** the remaining amount of accumulated OCI.*

Chapter 24 – Accounting for Derivatives and Hedging Transactions (Part 3)

Multiple Choice – Computational

Answers at a glance:

1.	C	11.	B	21.	C	31.	B	41.	C	51.	C
2.	C	12.	C	22.	B	32.	C	42.	D	52.	B
3.	A	13.	D	23.	A	33.	B	43.	C	53.	***E***
4.	A	14.	A	24.	C	34.	A	44.	B	54.	A
5.	C	15.	D	25.	A	35.	A	45.	C	55.	A
6.	A	16.	B	26.	C	36.	B	46.	D	56.	B
7.	C	17.	A	27.	B	37.	A	47.	A	57.	***E***
8.	D	18.	A	28.	A	38.	C	48.	A	58.	B
9.	D	19.	B	29.	D	39.	B	49.	D	59.	B
10.	A	20.	D	30.	D	40.	A	50.	B	60.	A
										61.	C
										62.	B
										63.	***E***
										64.	***E***
										65.	B

Solutions:

1. C

Solution:

Hedged item – None	***Futures contract (Derivative)***
	Dec. 1, 20x1 Deposit with broker ……..80K Cash……..80K *to record the initial margin deposit with the broker*

2. C

Solution:

Hedged item – None	***Futures contract (Derivative)***
	Dec. 31, 20x1 Loss on futures contract…..40K Futures contract (liability)...40K [(200 - 190) x 4,000] *to record the value of the derivative*

	computed as the change in the underlying multiplied by the notional amount.

3. A
Solution:

Hedged item – None	***Futures contract (Derivative)***
	Feb. 1, 20x2 Loss on futures contract… 20K [(190 - 185) x 4,000] Futures contract (liability)..40K Cash – local currency…… 20K Deposit with broker…….....80K *to recognize loss on the change in the fair value of the futures contract and to record the net cash settlement of the futures contract.*

40,000 loss in 20x1 + 20,000 loss in 20x2 = ***60,000 total loss***

4. A (See entry above)

5. C
Solution:

Hedged item – Inventory	***Hedging instrument – Futures contract (Derivative)***
Dec. 1, 20x1 No entry	***Dec. 1, 20x1*** Deposit with broker …….384K Cash……...384K *to record the initial margin deposit with the broker*

6. A
Solution:

Hedged item – Inventory	***Hedging instrument – Futures contract (Derivative)***
Dec. 31, 20x1 Inventory……100K Gain on fair value change...100K [(12,250 – 12,000) x 400] *to recognize the change in the fair value less costs to sell of the gold inventory.*	***Dec. 31, 20x1*** Loss on futures contract….80K Futures contract (liability)...80K [(12,300 -12,100) x 400] *to recognize the change in the fair value of the futures contract.*

7. C (See entries above)

8. D
Solution:

Hedged item – Inventory	***Futures contract (Derivative)***
Feb. 1, 20x2 Loss on fair value change…180K [(12,250 – 11,800) x 400] Inventory……180K *to recognize the change in the fair value less costs to sell of the gold inventory.*	***Feb. 1, 20x2*** Futures contract (asset).. 200K Gain on futures contract…200K [(12,300 – 11,800) x 400] *to recognize the change in the fair value of the futures contract.*
Feb. 1, 20x2 Cash.....4.72M Sale (11.8 spot price x 400).. 4.72M Cost of goods sold……. 4.72M Inventory (4.8M +100K – 180K) 4.72M *to recognize the sale of the gold inventory.*	***Feb. 1, 20x2*** Cash…….504K [(12.1K – 11.8K) x 400] + 384K Futures contract (asset).....120K (200K asset – 80K liability) Deposit with broker……..384K *to record the net cash settlement of the futures contract.*

9. D (See entries above)

10. A

Solution:

Outflow on deposit with broker - Dec. 1, 20x1	(384,000)
Cash receipt from sale	4,720,000
Net cash receipt on settlement of futures contract	504,000
Net cash receipt *(equal to the pre-agreed sale price)*	***4,840,000***

11. B

Solutions:

Hedged item – Inventory	***Hedging instrument – Futures contract (Derivative)***
Dec. 1, 20x1 No entry	***Dec. 1, 20x1*** Deposit with broker ……..80K Cash……..80K *to record the initial margin deposit with the broker*
Dec. 31, 20x1 Inventory……68K Gain on fair value change.....68K [(***371*** – ***354***) x 1,000] *to recognize the change in the fair value of the inventory due to changes in the hedged risk.*	***Dec. 31, 20x1*** Loss on futures contract....56K Futures contract (liability).. 56K [(374 -360) x 4,000] *to recognize the change in the fair value of the futures contract.*

12. C (See entries above)

13. D (See entries above)

14. A

Solution:

Hedged item – Inventory	***Futures contract (Derivative)***
Feb. 1, 20x2 Loss on fair value change…132K [(371 – 338) x 4,000] Inventory……132K *to recognize the change in the fair value of the inventory due to changes in the hedged risk.*	***Feb. 1, 20x2*** Futures contract (asset).. 144K Gain on futures contract… 144K [(374 – 338) x 4,000] *to recognize the change in the fair value of the futures contract.*
Feb. 1, 20x2 Cash (338 spot price x 4K)..1.352M Sales……..….1.352M Cost of goods sold…….896K Inventory (960K + 68K –132K) 896K *to recognize the sale of the soybean inventory.*	***Feb. 1, 20x2*** Cash……168K [(360 – 338) x 4K] + 80K deposit Futures contract (asset).....88K (144K asset – 56K liability) Deposit with broker……80K *to record the net cash settlement of the futures contract.*

15. D (1,352,000 sales *less* 896,000 cost of sales) = ***456,000*** (See entries above)

16. B

Solution:

Hedged item – Firm sale commitment	***Hedging instrument – Futures contract (Derivative)***
Dec. 1, 20x1 No entry	***Dec. 1, 20x1*** Deposit with broker …….120K Cash……120K *to record the initial margin deposit with the broker*
Dec. 31, 20x1 Loss on firm commitment.. 120K [(240 – 210) x 4,000] Firm commitment (liability) 120K *to recognize the change in the fair value of the firm commitment*	***Dec. 31, 20x1*** Future contract (asset)… 140K [(235 – 200) x 4,000] Gain on futures contract…..140K *to recognize the change in the fair value of the futures contract*

17. A (See entries above)

18. A

Solution:

Hedged item – Firm sale commitment	***Hedging instrument – Futures contract (Derivative)***
Feb. 1, 20x2	***Feb 1, 20x2***

Firm commitment (liability)..120K Loss on firm commitment.... 40K [(250 – 240) x 4,000] Cash…….. 840K (210 contract price x 4,000) Sale (250 spot price x 4,000)... 1M *to record the actual sale transaction*	Cash ……320K [(250 – 200) x 4,000] + 120K deposit Deposit with broker ……120K Futures contract (asset)….140K Gain on futures contract….. 60K [(250 – 235) x 4,000] *to record the net settlement of the futures contract.*

19. B (See entries above)

20. D (See entries above)

21. C

Solution:

The *changes in the expected cash flows on the forecasted transaction* and the *changes in the fair values of futures contract* are computed as follows:

	Hedged item: ***Forecasted transaction (Broccoli)***	*Hedging instrument:* ***Futures contracts (Cauliflower)***
Mar. 31, 20x1		
Current prices – Mar. 31	95.18	94.52
Previous prices – Jan. 1	93.76	92.98
Increase (Decrease)	1.42	1.54
Multiplied by: Kilograms of commodity	4,000	4,000 [a]
Changes during the period – 3/31/x1	***(5,680)***	***6,160***
Fair value - 1/1/x1	-	-
Cumulative changes – 3/31/x1	***(5,680)***	***6,160***
June 30, 20x1		
Current prices – June 30	96.20	95.36
Previous prices – Mar. 31	95.18	94.52
Increase (Decrease)	1.02	0.84
Multiplied by: Kilograms of commodity	4,000	4,000
Changes during the period – 6/30/x1	***(4,080)***	***3,360***
Fair value - 3/31/x1	(5,680)	6,160
Cumulative changes – 6/30/x1	***(9,760)***	***9,520***

[a] No. of futures contracts x Kilograms covered by each contract = (10 x 400) = 4,000.

Cumulative changes in:	*March 31*	*June 30*
Fair values of futures contract	6,160	9,520
Expected cash flows of forecasted transaction	5,680	9,760
Ratio	***108%***	***98%***

22. B (See solutions above)

23. A

Solution:

To determine the ***ineffectiveness*** of the hedge, the following procedures are performed:

Step 1: Determine the cumulative changes in the expected cash flows on the forecasted transaction.

Step 2: Determine the cumulative changes in the fair values of the hedging instrument.

Step 3: Determine the ***lower*** of the amounts computed in *Step 1* and *Step 2*, in absolute values.

Step 4: The amount determined in *Step 3* is the ***effective portion*** which is recognized in ***other comprehensive income***. The difference between the *change in the fair value of the hedging instrument* and the *effective portion* represents the ***ineffective portion*** which is recognized in ***profit or loss***.

The steps above are applied as follows:

	Forecasted transaction Broccoli	***Futures contract Cauliflower***	***Effective portion - OCI (Step 3)***		***Ineffective portion - P/L (Step 4)***	
Dates	***Cumulative change in cash flows (Step 1)***	***Cumulative change in fair values (Step 2)***	***Lower of a and b –*** *Cumulative OCI*	***OCI during the period***	*Cumulative P/L*	***P/L during the period***
	a	**b**	**c**	**d = c - prev. bal.**	**e = b - c**	**f = e - prev. bal.**
1/1/x1	-	-	-	-	-	-
3/31/x1	(5,680)	6,160	*5,680*	***5,680***	480	***480***
6/30/x1	(9,760)	9,520	*9,520*	***3,840***	-	***(480)***

24. C (See table above)

25. A - On March 31, 20x1, the effect of the hedge is ***"overhedge"*** (the increase in the cash inflows from the *hedging instrument* is

greater than the increase in the expected cash outflows on the *hedged item*).

26. C

Solution:

Hedged item – Highly probable forecast transaction	***Hedging instrument – Futures contract (Derivative)***
Jan. 1, 20x1 No entry	***Jan. 1, 20x1*** No entry
Mar. 31, 20x1 No entry	***Mar. 31, 20x1*** Futures contract…..6,160 Accumulated OCI…… 5,680 Gain on futures contract…. 480 *to recognize the change in the fair value of the **effective portion** of the futures contract in **OCI** and the **ineffective portion** in **profit or loss**.*
June 30, 20x1 Inventory……384,800 (4,000 x 96.20) Cash…….384,800 *to record the purchase of broccoli at the current price.*	***June 30, 20x1*** Futures contract……. 3,360 Loss on futures contract.. 480 Accumulated OCI……. 3,840 *to recognize the change in the fair value of the **effective portion** of the futures contract in **OCI** and the **ineffective portion** in **profit or loss**.*
	June 30, 20x1 Cash……9,520 Futures contract…….. 9,520 (6,160 + 3,360) *to record the **net** settlement of the futures contract.*

27. B (See table above)

28. A (See table above)

29. D (See entry above)

30. D – This amount is reclassified to profit or loss when the related inventory is sold.

31. B (384,800 cost of inventory – 9,520 reclassification adjustment of OCI) = ***375,280***

32. C

Solution:

Hedged item – Account receivable	***Hedging instrument – Put option (Derivative)***
Dec. 15, 20x1 Accounts receivable…… 1.92M (4M yens x 0.48 spot rate) Sales……...1.92M	***Dec. 15, 20x1*** Put option ……..…….. 30K Cash……..…… 30K
Dec. 31, 20x1 Accounts receivable……40K [4M x (0.49 - 0.48)] FOREX gain……...40K *to adjust the accounts receivable for the increase in spot exchange rate*	***Dec. 31, 20x1*** Loss on put option…..…..10K Put option……..10K (30K – 20K) *to recognize loss on the decrease in the fair value of the option.*
Jan. 15, 20x2 Cash – foreign currency.. 1.84M (4M x 0.46 current spot rate) FOREX loss…….. 120K Accounts receivable…….1.96M (1.92M + 40K) *to record the receipt of 4M yens from customer*	***Jan. 15, 20x2*** Cash – local currency…1.88M (4M x 0.47 option price) Put option (30K – 10K)…….. 20K Cash – foreign currency. 1.84M Gain on put option…..…… 20K *to record the **exercise** of the put option which is **in the money**.*

33. B (See entries above)

34. A ***20,000 - carrying amount of the option***

35. A

Solution:

Hedged item – None	***Call option (Derivative)***
April 1, 20x1	***April 1, 20x1*** Call option ……..…….. 2,400 Cash……..…… 2,400
June 30, 20x1	***June 30, 20x1*** Call option ……..…….. 24,000 [(106 – 100) x 4,000] Gain on call option……. 24,000 *to record the increase in the fair value of the call option due to the increase in **intrinsic value*** (excess of market value of shares over exercise price).
	June 30, 20x1 Loss on call option…….800 (2,400 – 1,600) Call option……..800

	*to record the decrease in the fair value of the call option due to the decrease in **time value**.* [1]
July 1, 20x1	***July 1, 20x1*** Cash…… 24,000 [(106 – 100) x 4,000] Loss on call option….1,600 Call option ……..…….…. 25,600 (2,400 + 24,000 – 800) *to record the **net settlement** of the call option contract.*

36. B (See entries above)

37. A (See entries above)

38. C
Solution:

Hedged item – Highly probable forecast transaction	***Hedging instrument – Put option (Derivative)***
Oct. 1, 20x1 No entry	***Oct. 1, 20x1*** Put option ……..……..25.6K Cash……..…… 25.6K *to record the purchase of option contract*

39. B – Cash flow hedge because the hedged item is a *highly probable* ***forecasted transaction***.

40. A
Solution:
The gain or loss on December 31, 20x1 is computed as follows:

	Change in:		***Change in fair value of option***
	Intrinsic value (OCI)	***Time value (P/L)***	
10.1.x1 *(see table above)*	-	25,600	25,600
12.31.x1 (1.12M ÷ 1.45) – 783,216	10,802	13,196	24,000
Gain (Loss)	***10,802***	***(12,404)***	***(1,600)***

41. C (See table above)

42. D
Solution:

	Change in:	***Change in***

	Intrinsic value (OCI)	*Time value (P/L)*	*fair value of option*
12.31.x1 *(see table above)*	10,802	13,196	24,000
4.1.x2 (1.12M ÷ 1.50) – 783,216	36,549	-	36,549
Gain (Loss)	***25,747***	***(13,196)***	***12,549***

43. C 746,667 + 36,550 = ***783,217***

Solution:

Hedged item – Highly probable forecast transaction
April 1, 20x2 Accounts receivable….746,667 Sales……746,667 (1,120,000 ÷ 1.50 spot rate) *to record the actual sale transaction*
April 1, 20x2 Accumulated OCI……..36,550 (10,802 + 25,748) Sales…… 36,550 *to reclassify accumulated OCI to profit or loss*

44. B

45. C

Solution:

	20x1	***20x2***
Receive variable [a]	320,000	400,000
Pay 8% fixed	320,000	320,000
Net cash settlement - receipt	-	***80,000***

[a] The interest rates used are the current rates as at the ***beginning of the year*** (i.e., 4M x ***8%*** = 320,000) & (4M x ***10%*** = 400,000).

There is no cash settlement in 20x1 because the variable and fixed rates are the same (i.e., 8% and 8%, respectively).

The net cash settlement in 20x2 is ***discounted*** to determine the fair value of the derivative on Dec. 31, 20x1:

Net cash settlement – receipt *(due on Dec. 31, 20x2)*	80,000
PV of 1 @ 10%, n=1	0.90909

Fair value of derivative - 12/31/x1 (asset)	***72,727***

46. D – the gain is recognized in ***OCI*** not in *P/L*
Solution:

Hedged item – Variable interest payments	***Hedging instrument – Interest rate swap (Derivative)***
Dec. 31, 20x1	***Dec. 31, 20x1***
Interest expense… 320,000	Interest rate swap…..72,727
Cash (4M x 8%)…….. 320,000	Accumulated OCI…….72,727
to recognize interest expense on the variable-rate loan	*to recognize the change in the fair value of the interest rate swap*

47. A (See computation in #45)

48. A (400,000 – 80,000) = ***320,000*** (See entries below)
Solution:

Hedged item – Variable interest payments	***Hedging instrument – Interest rate swap (Derivative)***
Dec. 31, 20x2	***Dec. 31, 20x2***
Interest expense….400,000	Cash……80,000
Cash (4M x 10%) ……..….400,000	Interest rate swap……...72,727
	Accum. OCI *(squeeze)*……7,273
to recognize interest expense on the variable-rate loan	*to record the net cash settlement of the interest rate swap*
Dec. 31, 20x2	***Dec. 31, 20x2***
Loan payable…….4M	Accumulated OCI…..80,000
Cash……4M	Interest expense…….80,000
to record the settlement of the loan	*to reclassify accumulated OCI to profit or loss*

49. D
Solution:

	20x1	***20x2***
Receive variable [a] (4M x ***9%***) & (4M x ***8%***)	360,000	320,000
Pay 9% fixed	360,000	360,000
Net cash settlement – payment	-	***(40,000)***

[a] Based on the current rates as at the ***beginning of the year***.

The net cash settlement is ***discounted*** to determine the fair value of the derivative on Dec. 31, 20x1.

Net cash payment *(due annually starting on Dec. 31, 20x2)*	(40,000)
PV of ordinary annuity of 1 @8%, n=2	1.783265
Fair value of derivative - 12/31/x1 (liability)	***(71,331)***

50. B (See computation above)

51. C (See computation above)

52. B – The fair value of the derivative on this date.

Solution:

	20x3
Receive variable (4M x ***12%***)	480,000
Pay 9% fixed	360,000
Net cash settlement – receipt	***120,000***

The net cash settlement is ***discounted*** to determine the fair value of the derivative on Dec. 31, 20x2.

Net cash receipt *(due on Dec. 31, 20x3 – maturity date)*	120,000
Multiply by: PV of 1 @12%, n=1	0.892857
Fair value of derivative - 12/31/x2 (asset)	***107,143***

53. **E**

CORRECTION: Dear Sir/Ma'am: The correct answer was omitted from the answer choices. I am sorry for the error. The CORRECT ANSWER is ***360,000*** (320,000 + 40,000) **(See entries below)**

Solution:

Hedged item – Variable interest payments	***Hedging instrument – Interest rate swap (Derivative)***
Dec. 31, 20x2	***Dec. 31, 20x2***
Interest expense…320,000	Interest rate swap…..40,000
Cash (4M x 8%)…..……320,000	Cash…….40,000
to recognize interest expense on the variable-rate loan	*to record the periodic net cash settlement on the interest rate swap - (see previous computation)*
	Dec. 31, 20x2
	Interest expense……..40,000
	Accumulated OCI……40,000
	to record a piecemeal reclassification of accumulated OCI to profit or loss

54. A (See computations in #52)

55. A

Solution:

The change in the fair value of the interest rate swap is determined as follows:

Fair value of interest rate swap – Dec. 31, 20x2 - *(asset)*	107,143
Less: Carrying amount of interest rate swap – Dec. 31, 20x2 (71,331 *liability* – 40,000 net cash settlement) - *(liability)*	(31,331)
Change in fair value – gain	***138,474***

56. B
Solution:

	20x3
Receive variable (1M x ***12%***)	480,000
Pay 9% fixed	360,000
Net cash settlement – receipt	***120,000***

57. **E**
CORRECTION: Dear Sir/Ma'am: The correct answer was omitted from the answer choices. I am sorry for the error. The CORRECT ANSWER is ***360,000*** **(See solution below)**

Interest expense (4M x 12%)	480,000
Reclassification of accum. OCI	(120,000)
Net interest expense - 20x3	***360,000***

58. B
Solutions:
Hedging instrument:
The *net cash settlement* on the swap is determined as follows:

	20x1	***20x2***
Receive 10% fixed	400,000	400,000
Pay variable[a] (4M x ***10%***) & (4M x ***12%***)	400,000	480,000
Net cash settlement – payment	-	*(80,000)*

[a] Based on the current rates as at the ***beginning of the year***.

The net cash settlement is ***discounted*** to determine the fair value of the derivative on Dec. 31, 20x1.

Net cash payment *(due annually starting on Dec. 31, 20x2)*	(80,000)
PV of ordinary annuity of 1 @12%, n=2	1.69005
Fair value of derivative - 12/31/x1 (liability)	***(135,204)***

PV of ordinary annuity is used because swap payments are made at each year-end (i.e., Dec. 31, 20x2 and Dec. 31, 20x3; 'n=2'). A liability is recognized because the net cash settlement is a *payment*.

59. B

Solution:

Fair value of derivative - 12/31/x1 (liability)	(135,204)
Fair value of derivative - 12/1/x1	-
Unrealized loss on the derivative instrument	***(135,204)***

60. A

Solution:

Hedged item:

The fair value of the loan payable on Dec. 31, 20x1 is determined as follows:

Future cash flows:		**PVF @12% current rate, n=2**	***Present value***
Principal	4,000,000	0.797193878	3,188,776
Interest at 10% fixed rate	400,000	1.69005102	676,020
			3,864,796

Fair value of loan payable - Dec. 31, 20x1	3,864,796
Carrying amount of loan payable - Dec. 31, 20x1	4,000,000
Gain on decrease in liability	***135,204***

61. C

Solution:

Date	***Interest payments***	***Interest expense @ 12%***	***Amortization***	***Present value***
12/31/x1				3,864,796
12/31/x2	400,000	***463,776***	63,776	*3,928,572*

62. B

Solution:

Hedging instrument:

The *net cash settlement* in 20x3 is determined as a basis for adjusting the fair value of the interest rate swap on Dec. 31, 20x2.

	20x3
Receive 10% fixed	400,000
Pay variable (4M x ***14%***)	560,000
Net cash settlement – payment	***(160,000)***

The net cash settlement is ***discounted*** to determine the fair value of the derivative on Dec. 31, 20x2.

Net cash payment *(due on Dec. 31, 20x3 – maturity date)*	(160,000)
Multiply by: PV of 1 @14%, n=1	0.877192982
Fair value of derivative - 12/31/x2 (liability)	***(140,351)***

63. **E**

CORRECTION: Dear Sir/Ma'am: The correct answer was omitted from the answer choices. I am sorry for the error. The CORRECT ANSWER is ***(85,147)*** **(See solution below)**

Fair value of interest rate swap – Dec. 31, 20x2 - *(liability)*	140,351
Carrying amount of interest rate swap – Dec. 31, 20x2 (135,204 *liability* – 80,000 net cash settlement) - *(liability)*	(55,204)
Change in fair value – loss *(increase in liability)*	***85,147***

64. **E**

CORRECTION: Dear Sir/Ma'am: The correct answer was omitted from the answer choices. I am sorry for the error. The CORRECT ANSWER is ***(68,923)*** **(See solution below)**

Solution:

Hedged item:

The fair value of the loan payable on Dec. 31, 20x2 is determined as follows:

Future cash flows:		**PVF @14% current rate, n=1**	***Present value***
Principal	4,000,000	0.877192982	3,508,772
Interest at 10% fixed rate	400,000	0.877192982	350,877
			3,859,649

The gain or loss on the change in the fair value of the loan payable is determined as follows:

Fair value of loan payable - Dec. 31, 20x2	3,859,649
Carrying amt. - Dec. 31, 20x2 *(see amortization table above)*	3,928,572
Gain on decrease in liability – Dec. 31, 20x2	***68,923***

65. B

Solution:

Date	***Interest***	***Interest***	***Amortizatio***	***Present***

	payments	***expense @ 14%***	***n***	***value***
12/31/x2				3,859,649
12/31/x3	400,000	***540,351***	140,351	*4,000,000*

Exercises

1. *Solution:*

The entry on December 1, 20x1 is as follows:

Hedged item – None	***Futures contract (Derivative)***
	Dec. 1, 20x1 Deposit with broker ……..80K Cash……..80K *to record the initial margin deposit with the broker*
	Dec. 31, 20x1 Loss on futures contract…..20K Futures contract (liability)...20K [(200 - 190) x 2,000] *to record the value of the derivative computed as the change in the underlying multiplied by the notional amount.*
	Feb. 1, 20x2 Loss on futures contract… 10K [(190 - 185) x 2,000] Futures contract (liability).. 20K Cash – local currency…… 10K Deposit with broker……....40K *to recognize loss on the change in the market value of the futures contract and to record the net cash settlement of the futures contract.*

2. *Solution:*

The entries are as follows:

Hedged item – Inventory	***Hedging instrument - Futures contract (Derivative)***
Dec. 1, 20x1 No entry	***Dec. 1, 20x1*** Deposit with broker ……..192K Cash……..192K *to record the initial margin deposit with the broker*
Dec. 31, 20x1 Inventory……..……50K Gain on fair value change.....50K	***Dec. 31, 20x1*** Loss on futures contract….40K Futures contract (liability)...40K

[(12.250K – 12K) x 200] *to recognize the change in the fair value less costs to sell of the gold inventory.*	[(12.3K -12.1K) x 200] *to recognize the change in the fair value of the futures contract.*
Feb. 1, 20x2 Loss on fair value change…90K [(12.250K – 11.8K) x 200] Inventory……..90K *to recognize the change in the fair value less costs to sell of the gold inventory.*	***Feb. 1, 20x2*** Futures contract (asset).. 100K Gain on futures contract… 100K [(12.3K – 11.8K) x 200] *to recognize the change in the fair value of the futures contract.*
Feb. 1, 20x2 Cash……..2.36M Sale (11.8 spot price x 200).. 2.36M Cost of goods sold……. 2.36M Inventory (2.4M + 50K – 90K) 2.36M *to recognize the sale of the gold inventory.*	***Feb. 1, 20x2*** Cash…….252K [(12.1K – 11.8K) x 200] + 192K Futures contract (asset).....60K (100K asset – 40K liability) Deposit with broker…… 192K *to record the net cash settlement of the futures contract.*

3. *Solution:*

The entries on December 1, 20x1 are as follows:

Hedged item – Inventory	***Hedging instrument - Futures contract (Derivative)***
Dec. 1, 20x1 No entry	***Dec. 1, 20x1*** Deposit with broker ……..40K Cash……..40K *to record the initial margin deposit with the broker*
Dec. 31, 20x1 Inventory……..……34K Gain on fair value change.....34K [(***371*** – ***354***) x 2,000] *to recognize the change in the fair value of the inventory due to changes in the hedged risk.*	***Dec. 31, 20x1*** Loss on futures contract....28K Futures contract (liability)..28K [(374 -360) x 2,000] *to recognize the change in the fair value of the futures contract.*
Feb. 1, 20x2 Loss on fair value change…66K [(371 – 338) x 2,000] Inventory……..66K *to recognize the change in the fair value of the inventory due to changes in the hedged risk.*	***Feb. 1, 20x2*** Futures contract (asset).. 72K Gain on futures contract… 72K [(374 – 338) x 2,000] *to recognize the change in the fair value of the futures contract.*
Feb. 1, 20x2 Cash (338 spot price x 2K).... 676K	***Feb. 1, 20x2*** Cash…….84K

Sales……..676K Cost of goods sold……448K Inventory (480K + 34K – 66K). 448K *to recognize the sale of the soybean inventory.*	[(360 – 338) x 2K] + 40K deposit Futures contract (asset).....44K (72K asset – 28K liability) Deposit with broker……40K *to record the net cash settlement of the futures contract.*

4. *Solution:*

Hedged item – Firm sale commitment	***Hedging instrument - Futures contract (Derivative)***
Dec. 1, 20x1 No entry	***Dec. 1, 20x1*** Deposit with broker ……..60K Cash……..60K *to record the initial margin deposit with the broker*
Dec. 31, 20x1 Loss on firm commitment..60K [(240 – 210) x 2,000] Firm commitment (liability)…60K *to recognize the change in the fair value of the firm commitment*	***Dec. 31, 20x1*** Future contract (asset)……70K [(235 – 200) x 2,000] Gain on futures contract….. 70K *to recognize the change in the fair value of the futures contract*
Feb. 1, 20x2 Firm commitment (liability)..60K Loss on firm commitment....20K [(250 – 240) x 2,000] Cash……..420K (210 contract price x 2,000) Sale (250 spot price x 2,000)...500K *to record the actual sale transaction, to recognize the change in the fair value of the firm commitment, and to derecognize the firm commitment.*	***Feb 1, 20x2*** Cash ……160K [(250 – 200) x 2,000] + 60K deposit Deposit with broker ……..60K Futures contract (asset)…. 70K Gain on futures contract……30K [(250 – 235) x 2,000] *to recognize the change in the fair value of the futures contract and to record the net settlement of the futures contract.*

5. *Solutions:*

The changes in the expected cash flows/ fair value of futures contract are computed as follows:

	Forecasted transaction - Broccoli	***Futures contracts - Cauliflower***
Mar. 31, 20x1		
Price - 3/31	95.18	94.52
Price - 1/1	93.76	92.98

Increase (Decrease)	1.42	1.54
Multiplied by:	2,000	10 [a]
Multiplied by:	N/A	200 [b]
Change in cash flow/ fair value - gain (loss) – 3/31/x1	***(2,840)***	***3,080***
Fair value - 1/1/x1	-	-
Cumulative change in cash flow/ fair value - gain (loss) – 3/31/x1	*(2,840)*	*3,080*
June 30, 20x1		
Price - 6/30	96.20	95.36
Price - 3/31	95.18	94.52
Increase (Decrease)	1.02	0.84
Multiplied by:	2,000	10 [a]
Multiplied by:	N/A	200 [b]
Change in cash flow/ fair value - gain (loss) – 6/30/x1	***(2,040)***	***1,680***
Fair value - 3/31/x1	(2,840)	3,080
Cumulative change in cash flow/ fair value - gain (loss) – 6/30/x1	*(4,880)*	*4,760*

[a] Number of futures contracts.

[b] Number of kilograms of cauliflower covered by each futures contract.

There are ***losses*** on the forecasted transaction because the ***purchase*** prices of broccoli increased. There are ***gains*** on the futures contract because ***purchase*** prices of cauliflower increased but ABC Co. is still able to purchase at a *lower price.*

Requirement (a):

Assessment of "highly effectiveness" and ineffectiveness

The *"highly effectiveness"* of the hedge as of March 31, 20x1 and June 30, 20x1 are assessed as follows:

	March 31, 20x1	***June 30, 20x1***
Cumulative change in fair value of futures contract	3,080	4,760
Cumulative change in expected cash flows of forecasted transaction	2,840	4,880
Ratio	***108%***	***98%***

Requirement (b):

	Forecasted transaction – Broccoli		***Futures contract - Cauliflower***			
	Change in cash flows	***Cumula-tive change***	***Change in fair values***	***Cumu-lative change***	***Lower of b and d in absolute amounts***	***Accumulated in OCI***
	a	**b**	**c**	**d**		
3/31/x1	(2,840)	*(2,840)*	3,080	*3,080*	*2,840*	***2,840***
6/30/x1	(2,040)	*(4,880)*	1,680	*4,760*	*4,760*	***1,920***

Requirement (c):

The pertinent entries are as follows:

Hedged item – Highly probable forecast transaction	***Hedging instrument – Futures contract (Derivative)***
Jan. 1, 20x1 No entry	***Jan. 1, 20x1*** No entry
Mar. 31, 20x1 No entry	***Mar. 31, 20x1*** Futures contract….. 3,080 Accumulated OCI…… 2,840 Gain on futures contract…. 240 *to recognize the change in the fair value of the **effective portion** of the futures contracts in **other comprehensive income** and the **ineffective portion** in **profit or loss**.*
June 30, 20x1 Inventory……192,400 (2,000 x 96.20) Cash……..192,400 *to record the purchase of broccoli at the current price.*	***June 30, 20x1*** Futures contract……. 1,680 Loss on futures contract.. 240 Accumulated OCI……. 1,920 *to recognize in other comprehensive income the change in the fair value of the effective portion of the futures contracts and to reclassify into other comprehensive income the gain on the futures contracts that was previously recognized in earnings.*
	June 30, 20x1 Cash……4,760 Futures contract……..4,760 (3,080 + 1,680) *to record the **net** settlement of the futures contract.*

July 15, 20x1 Cash……260,000 Cost of goods sold….192,400 Inventory…… 192,400 Sales…….260,000 *to record the sale of inventory*	***July 15, 20x1*** Accumulated OCI…….4,760 (2,840 + 1,920) Cost of goods sold……4,760 *to reclassify accumulated gains on forward contract to profit or loss as a* ***reduction to cost of goods sold****.*

6. *Solution:*

The entries are as follows:

Hedged item – Sale	***Hedging instrument – Put option (Derivative)***
Dec. 15, 20x1 Accounts receivable……960K (2M yens x 0.48 spot rate) Sales……...960K	***Dec. 15, 20x1*** Put option ……..……..15K Cash……..……15K
Dec. 31, 20x1 Accounts receivable……20K [2M x (0.49 - 0.48)] FOREX gain……...20K *to adjust accounts receivable for the increase in spot exchange rate*	***Dec. 31, 20x1*** Loss on put option…..…..5K Put option……..5K (15K – 10K) *to recognize loss on the decrease in fair value of the option.*
Jan. 15, 20x2 Cash – foreign currency…920K (2M x 0.46 current spot rate) FOREX loss……...50K Accounts receivable…….980K (960K + 20K) *to record the receipt of 1M yens from customer*	***Jan. 15, 20x2*** Cash – local currency…940K (2M x 0.47 option price) Put option……10K Cash – foreign currency…920K Gain on put option…..……10K *to record the* ***exercise*** *of the put option which is* ***in the money****.*

7. *Solution:*

The entry on April 1, 20x1 is as follows:

Hedged item – None	***Hedging instrument – Call option (Derivative)***
April 1, 20x1	***April 1, 20x1*** Call option ……..…….. 1,200 Cash……..…… 1,200
June 30, 20x1	***June 30, 20x1*** Call option ……..…….. 12,000 [(106 – 100) x 2,000] Gain on call option……. 12,000 *to record the increase in the fair value of the call option due to the increase in*

	intrinsic value.
	June 30, 20x1 Loss on call option…….400 (1,200 – 800) Call option……..400 *to record the decrease in the fair value of the call option due to the decrease in* ***time value***.
July 1, 20x1	***July 1, 20x1*** Cash……12,000 [(106 – 100) x 2,000] Loss on call option…..... 800 Call option ……..…….…12,800 (1,200 + 12,000 – 400) *to record the* ***net settlement*** *of the call option contract.*

8. *Solution:*

The entries are as follows:

Hedged item – Forecast transaction	***Hedging instrument – Put option (Derivative)***
Oct. 1, 20x1 No entry	***Oct. 1, 20x1*** Put option ……..……..12.8K Cash……..……12.8K *to recognize the cost incurred to purchase the option contract*

The gain or loss on the hedging instrument recognized in ***other comprehensive income*** is computed as follows:

Date		***"Spot" intrinsic value of option***
Oct. 1, 20x1		-
Dec. 31, 20x1	(INR 560K ÷ 1.43) - (INR 560K ÷1.45)	5,402
Apr. 1, 20x2	(INR 560K ÷ 1.43) - (INR 560K ÷1.50)	18,276

The total net loss/gain on December 31, 20x1 is computed as follows:

Change in "spot" intrinsic value - *effective portion* (OCI) (0 - 5,402)	(5,402)
Change in fair value of option - *ineffective portion* (12K - 12.8K)	(800)
Total loss during the period – excluded	***(6,202***

component ( )

The entries on December 31, 20x1 are as follows:

Hedged item – Forecast transaction	***Hedging instrument – Put option (Derivative)***
Dec. 31, 20x1 No entry	***Dec. 31, 20x1*** Loss on put option (excluded component)……..….6,202 Put option…….. 800 Accumulated OCI…….. 5,402 *to recognize loss on the effective and ineffective portions of the decrease in fair value of the option.*
April 1, 20x2 Accounts receivable….373,334 Sales……373,334 (560,000 ÷ 1.50 spot rate) *to record the actual sale transaction*	***April 1, 20x2*** Loss on put option (excluded component)…… 6,598 Put option…… 6,276 Accumulated OCI…..……12,874 *to record the changes in fair values*
April 1, 20x2 Accumulated OCI……..18,276 (5,402 + 12,874) Sales……18,276 *to reclassify accumulated OCI to profit or loss*	***April 1, 20x2*** Cash……... 18,276 Put option……18,276 (12,800 - 800 + 6,276) *to record the exercise and settlement of the put option*

9. *Solutions:*

The entries on January 1, 20x1 are as follows:

Hedged item – Variable interest payments	***Hedging instrument – Interest rate swap (Derivative)***
Jan. 1, 20x1 Cash……..2M Loan payable……2M *to recognize loan payable*	***Jan. 1, 20x1*** No entry

The change in fair value of the derivative is analyzed as follows:

	Dec. 31, 20x1	***Dec. 31, 20x2***
Receive variable [a]	160,000	200,000
Pay 8% fixed	160,000	160,000
Net cash settlement - receipt	-	***40,000***

[a] Interest rates used are the current rates as at the ***beginning of the year*** (i.e., 160,000 = 2M x 8%; 200,000 = 2M x 10%).

The fair value of the derivative is the ***discounted*** value of the net cash settlement.

Net cash settlement - receipt	40,000
PV of 1 @ 10%, n=1	0.90909
Fair value of derivative - 12/31/x1	***36,364***

The entries on December 31, 20x1 are as follows:

Hedged item – Variable interest payments	***Hedging instrument – Interest rate swap (Derivative)***
Dec. 31, 20x1 Interest expense……160,000 Cash……..……160,000 *to recognize interest expense*	***Dec. 31, 20x1*** Interest rate swap…..36,364 Accumulated OCI…….36,364 *to recognize unrealized gain in OCI for the increase in fair value of the interest rate swap*

The entries on December 31, 20x2 are as follows:

Hedged item – Variable interest payments	***Hedging instrument – Interest rate swap (Derivative)***
Dec. 31, 20x2 Interest expense……160,000 Cash……..……160,000 *to recognize interest expense*	***Dec. 31, 20x2*** Cash……40,000 Interest rate swap……...36,364 Accumulated OCI…… 3,636 *to record the net cash settlement of the interest rate swap*
Dec. 31, 20x2 Loan payable…….2M Cash……2M *to record the settlement of the loan*	***Dec. 31, 20x2*** Accumulated OCI…..40,000 Interest expense…….40,000 *to reclassify accumulated OCI to profit or loss*

10. *Solutions:*

The entries on January 1, 20x1 are as follows:

Hedged item – Variable interest payments	***Hedging instrument – Interest rate swap (Derivative)***
Jan. 1, 20x1 Cash……2M Loan payable……2M *to recognize loan payable*	***Jan. 1, 20x1*** No entry

The net cash settlement on the interest rate swap on December 31, 20x1 is computed as follows:

	Dec. 31, 20x1
Receive variable - 9% current rate at Jan. 1, 20x1	180,000
Pay 9% fixed	180,000
Net cash settlement - Dec. 31, 20x1	-

There is ***no*** cash settlement because the current rate as of the beginning of 20x1 and the fixed rate are equal. However, since the rate on January 1, 20x2 is 8% (i.e., not equal to the fixed rate of 9%), there is an expected cash settlement in future periods. This will be the basis in determining the fair value of the interest rate swap as of December 31, 20x1.

	Jan. 1, 20x2
Receive variable - 8% current rate at Jan. 1, 20x2	160,000
Pay 9% fixed	180,000
Net cash settlement - payment, Dec. 31, 20x2	(20,000)

The ***discounted*** amount of the net cash settlement is the deemed fair value of the interest rate swap on December 31, 20x1.

Net cash settlement - payment, Dec. 31, 20x2	(20,000)
Multiply by: PV of ordinary annuity of 1 @8%, n=2 [a]	1.783265
Fair value of interest rate swap – Dec. 31, 20x1	(35,667)

[a] The discount rate used is the current market rate as of January 1, 20x2. PV of ordinary annuity is used because swap payments are made each year-end. An "n" of 2 is used because there are two future payments to be made, i.e., December 31, 20x2 and December 31, 20x3.

The entries on December 31, 20x1 are as follows:

Hedged item – Variable interest payments	***Hedging instrument – Interest rate swap (Derivative)***
Dec. 31, 20x1	***Dec. 31, 20x1***
Interest expense……180,000	Accumulated OCI…….35,667
Cash……..……180,000	Interest rate swap……...35,667
to recognize interest expense	*to recognize unrealized loss in OCI for the decrease in fair value of the interest rate swap*

The entries on December 31, 20x2 are as follows:

Hedged item – Variable interest payments	***Hedging instrument – Interest rate swap (Derivative)***
Dec. 31, 20x2	***Dec. 31, 20x2***
Interest expense……180,000	Interest rate swap…….20,000
Cash……..……180,000	Cash……20,000

to recognize interest expense	*to record the periodic net cash settlement on the interest rate swap* (see previous computations)
	Dec. 31, 20x2 Interest expense……...20,000 Accumulated OCI……20,000 *to record piecemeal reclassification of accumulated OCI to profit or loss*

The expected net cash settlement on December 31, 20x3 is determined as a basis for adjusting the fair value of the interest rate swap.

	Jan. 1, 20x3
Receive variable - 12% current rate at Jan. 1, 20x3	240,000
Pay 9% fixed	180,000
Net cash settlement - receipt, Dec. 31, 20x3	60,000
Net cash settlement - receipt, Dec. 31, 20x3	60,000
Multiply by: PV of 1 @12%, n=1 [b]	0.892857
Fair value of interest rate swap - Dec. 31, 20x2	53,572

[b] The discount rate used is the current market rate as of January 1, 20x3. An "n" of 1 is used because there is one future payment to be made, i.e., December 31, 20x3.

The unrealized gain (loss) on the change in fair value of the interest rate swap is determined as follows:

Fair value of interest rate swap - Dec. 31, 20x2	53,572
Carrying amount of interest rate swap - Dec. 31, 20x2, net of net cash settlement (35,667 - 20,000)	(15,667)
Unrealized gain on increase in fair value of interest rate swap - Dec. 31, 20x2	***69,235***

The entry to recognize the change in fair value of the interest rate swap on December 31, 20x2 is as follows:

Hedged item – Variable interest payments	***Hedging instrument – Interest rate swap (Derivative)***
	Dec. 31, 20x2 Interest rate swap….69,235

	Accumulated OCI…….69,235 *to recognize unrealized gain in OCI for the increase in fair value of the interest rate swap*

The entries on December 31, 20x3 are as follows:

Hedged item – Variable interest payments	***Hedging instrument – Interest rate swap (Derivative)***
Dec. 31, 20x3 Interest expense……180,000 Cash……..……180,000 *to recognize interest expense*	***Dec. 31, 20x3*** Cash……60,000 Interest rate swap……53,570 Accum. OCI ***(squeeze)***.. 6,430 *to record the **final net cash settlement** on the interest rate swap and to **close** the balance of the interest rate swap account.*
Dec. 31, 20x3 Loan payable…….2M Cash…….2M *to record the settlement of the loan*	***Dec. 31, 20x2*** Accumulated OCI……60,000 Interest expense……...60,000 *to record final reclassification of accumulated OCI to profit or loss*

11. *Solution:*

The entries on January 1, 20x1 are as follows:

Hedged item – Fixed interest payments	***Hedging instrument – Interest rate swap (Derivative)***
Jan. 1, 20x1 Cash……2M Loan payable……2M *to recognize loan payable*	***Jan. 1, 20x1*** No entry

There is ***no*** cash settlement on December 31, 20x1 because the current rate as of the beginning of 20x1 and the fixed rate are equal (i.e., both at 10%). However, since the rate on January 1, 20x2 is 12%, there is an expected cash settlement in future periods. This will be the basis in determining the fair value of the interest rate swap as of December 31, 20x1.

	Jan. 1, 20x2
Receive 10% fixed	200,000
Pay variable - 12% current rate at Jan. 1, 20x2	240,000
Net cash settlement - payment, Dec. 31, 20x2	***(40,000)***

The ***discounted*** amount of the net cash settlement is the deemed fair value of the interest rate swap on December 31, 20x1.

Net cash settlement - payment, Dec. 31, 20x2 (40,000)

Multiply by: PV of ordinary annuity of 1 @12%, n=2 [a]	1.69005
Fair value of interest rate swap – Dec. 31, 20x1	(67,602)

[a] The discount rate used is the current market rate as of January 1, 20x2. PV of ordinary annuity is used because swap payments are made each year-end. An "n" of 2 is used because there are two future payments to be made, i.e., December 31, 20x2 and December 31, 20x3.

The fair value of the loan payable as of December 31, 20x1 is determined as follows:

Future cash flows:		**PVF @12% current rate, n=2**	***Present value***
Principal	2,000,000	0.797193878	1,594,388
Interest at 10% fixed rate	200,000	1.69005102	338,010
			1,932,398

The gain or loss on the change in the fair value of the hedged item is determined as follows:

Fair value of loan payable - Dec. 31, 20x1	1,932,398
Carrying amount of loan payable - Dec. 31, 20x1	2,000,000
Gain on decrease in liability	***67,602***

The entries on December 31, 20x1 are as follows:

Hedged item – Fixed interest payments	***Hedging instrument – Interest rate swap (Derivative)***
Dec. 31, 20x1 Interest expense……200,000 Cash……200,000 *to recognize interest expense*	***Dec. 31, 20x1*** Unrealized loss…….67,602 Interest rate swap…….67,602 *to recognize unrealized loss in P/L for the decrease in fair value of the interest rate swap*
Dec. 31, 20x1 Loan payable…….67,602 Unrealized gain……..67,602 *to recognize unrealized gain in P/L for the decrease in fair value of loan payable*	

The interest expense in December 31, 20x2 is determined through the ***effective interest method***. This is because there is a ***discount***

represented by the decrease in liability on December 31, 20x1. A partial amortization table is provided below:

Date	*Interest payments*	*Interest expense @ 12%*	*Amortization*	*Present value*
12/31/x1				1,932,398
12/31/x2	200,000	***231,888***	31,888	*1,964,286*

The entries on December 31, 20x2 are as follows:

Hedged item – Fixed interest payments	***Hedging instrument – Interest rate swap (Derivative)***
Dec. 31, 20x2	***Dec. 31, 20x2***
Interest expense……231,888	Interest rate swap…….40,000
Cash……..…200,000	Cash……40,000
Loan payable……..31,888	
to recognize interest expense	*to record the periodic net cash settlement on the interest rate swap* (see previous computations)

The expected net cash settlement on December 31, 20x3 is determined as a basis for adjusting the fair value of the interest rate swap.

	Jan. 1, 20x3
Receive 10% fixed	200,000
Pay variable - 14% current rate at Jan. 1, 20x3	280,000
Net cash settlement - payment, Dec. 31, 20x3	***(80,000)***
Net cash settlement - payment, Dec. 31, 20x3	(80,000)
Multiply by: PV of 1 @14%, n=1 [b]	0.87719
Fair value of interest rate swap - Dec. 31, 20x2	(70,176)

[b] The discount rate used is the current market rate as of January 1, 20x3. An "n" of 1 is used because there is one future payment to be made, i.e., December 31, 20x3.

The unrealized gain (loss) on the change in fair value of the interest rate swap is determined as follows:

Fair value of interest rate swap - Dec. 31, 20x2	(70,176)
Carrying of interest rate swap - Dec. 31, 20x2, net of net cash settlement (33,801 – 20,000)	(27,602)

Unrealized loss on decrease in fair value of interest rate swap - Dec. 31, 20x2	***(42,574)***

The fair value of the loan payable as of December 31, 20x2 is determined as follows:

Future cash flows:		**PVF @14% current rate, n=1**	***Present value***
Principal	2,000,000	0.877192982	1,754,386
Interest at 10% fixed rate	200,000	0.877192982	175,438
			1,929,824

The gain or loss on the change in the fair value of the hedged item is determined as follows:

Fair value of loan payable - Dec. 31, 20x2	1,929,824
Carrying amount of loan payable - Dec. 31, 20x2 (see amortization table above)	1,964,286
Gain on decrease in liability	***34,462***

The entries to recognize the changes in fair values of the loan payable and interest rate swap on December 31, 20x2 are as follows:

Hedged item – Fixed interest payments	***Hedging instrument – Interest rate swap (Derivative)***
Dec. 31, 20x2	***Dec. 31, 20x2***
Loan payable…….34,462	Unrealized loss…….42,574
Unrealized gain……..34,462	Interest rate swap….42,574
to recognize unrealized gain in P/L for the decrease in fair value of loan payable	*to recognize unrealized loss in P/L for the decrease in fair value of the interest rate swap*

The interest expense in 20x3 is again computed using the effective interest method.

Date	***Interest payments***	***Interest expense @ 14%***	***Amortization***	***Present value***
12/31/x2				1,929,824
12/31/x3	200,000	***270,176***	70,176	*2,000,000*

The entries on December 31, 20x3 are as follows:

Hedged item – Fixed interest payments	***Hedging instrument – Interest rate swap (Derivative)***
Dec. 31, 20x3	***Dec. 31, 20x3***
Interest expense……270,176	Interest rate swap…….70,176
Cash……..…200,000	Loss on interest rate

Loan payable……..70,176 *to recognize interest expense*	swap ***(squeeze)***……...9,824 Cash…….80,000 *to record the **final** net cash settlement* (see previous computations) *and to derecognize the interest rate swap*
Dec. 31, 20x3 Loan payable…….2M Cash……2M *to record the settlement of the loan*	

12. *Solutions:*

Case #1:

The ***inter-company accounts*** are adjusted to closing rates as follows:

Receivable from XYZ, Inc. (in pesos)	2,000,000
Multiply by: Spot rate	2
Adjusted balance of Payable to ABC Co. (in AMD)	***4,000,000***

Payable to ABC Co. (in AMD) - unadjusted	3,500,000
Adjusted balance of Payable to ABC Co. (in AMD)	4,000,000
FOREX loss recognized in subsidiary's separate income statement (in AMD)	***(500,000)***

The subsidiary's profit or loss ***after*** FOREX adjustment on inter-company accounts is computed as follows:

XYZ's separate profit before FOREX loss (in AMD)	3,500,000
FOREX loss recognized in subsidiary's separate income statement (in AMD)	(500,000)
XYZ's separate profit after FOREX loss (in AMD)	***3,000,000***

The translation adjustment to be recognized in OCI in the consolidated financial statements can now be computed as follows:

Translation of XYZ's net assets

Net assets of sub., July 1, 20x1 – at opening rate	(6M ÷ 1.50)	P4,000,000
Net assets of sub., July 1, 20x1 – at closing rate	(6M ÷ 2.00)	3,000,000
Decrease in net assets - FOREX translation loss		*(1,000,000)*

Parent's share in FOREX translation loss		100%	P(1,000,000)
Translation of XYZ's profit			
Profit of subsidiary at average rate	(3M ÷ 1.75)	1,714,286	
Profit of sub at closing rate	(3M ÷ 2)	1,500,000	
Decrease in profit - FOREX translation loss		(214,286)	
Parent's share in FOREX gain		100%	(214,286)
Total FOREX translation loss – OCI (in pesos)			***P (1,214,286)***

Case #2:

The fair value of the forward contract on July 1, 20x1 is ***zero***.

The fair value of the forward contract on December 31, 20x1 is computed as follows:

Six-month forward rate at 12/31/20x1 (10M ÷ 2.02)	4,950,496
Terms of the forward contract (10M ÷ 1.54)	6,493,506
Difference between forward contract and forward rates	*1,543,012*
Multiply by: PV factor *(given)*	0.971286
Fair value of forward contract - Dec. 31, 20x1	*1,498,706*

The gain (loss) on the forward contract is computed as follows:

Fair value of forward contract - July 1, 20x1	**-**
Fair value of forward contract - Dec. 31, 20x1	1,498,706
Increase in fair value - Unrealized gain in OCI (gross of tax)	*1,498,706*
Less: Deferred tax liability (1,498,706 x 40%)	(599,482)
Unrealized gain in OCI (net of tax)	***899,224***

The total translation gain (loss) to be recognized in ***other comprehensive income*** is computed as follows:

Total FOREX translation loss – OCI (without hedging - see *Case #1*)	(1,214,286)
Unrealized gain in OCI - net of tax	899,224
Total FOREX translation loss - OCI (with hedging)	***(315,062)***

13. *Solution:*

Case #1:

Fixed selling price	50,000
Selling price at current spot rate (2M ÷ 35)	57,143
Excess to be ***paid*** to broker	***(7,143)***

Case #2:

Fixed selling price	50,000
Selling price at current spot rate (2M ÷ 50)	40,000
Deficiency to be ***received*** from broker	***10,000***

Case #3:

Fixed selling price	50,000
Selling price at current spot rate (2M ÷ 45)	44,444
Fair value of forward contract – receivable	***5,556***

14. *Solution:*
Requirement (a):

Fixed purchase price (P600 x 2,000)	1,200,000
Purchase price at current market price (P700 x 2,000)	1,400,000
Derivative asset - receivable from broker	***200,000***

The derivative need ***not*** be discounted since it is to be settled within 15 days.

Requirement (b):

Fixed purchase price (P600 x 2,000)	1,200,000
Purchase price at current market price (P550 x 2,000)	1,100,000
Derivative liability - payable to broker	***(100,000)***

15. *Solutions:*
Requirement (a):
P10,000,000 (200,000 kilos notional figure x P50 forward price)

Requirement (b):

Fixed purchase price (200,000 x P50)	10,000,000
Purchase price at current market price (200,000 x 65)	13,000,000
Receivable from broker	*3,000,000*
Multiply by: PV of 1 @10%, n=1	0.90909
Fair value of derivative asset	***2,727,270***

Requirement (c):

Fixed purchase price (200,000 x P50)	10,000,000
Purchase price at current market price (200,000 x 40)	8,000,000
Payable to broker	*(2,000,000)*
Multiply by: PV of 1 @10%, n=0	1
Fair value of derivative liability	***(2,000,000)***

16. *Solution:*

"Long" futures contract to purchase gold:

Fixed purchase price (P2,000 x 200)	400,000	
Purchase price at current market price (P1,800 x 200)	360,000	
Payable to broker		(40,000)

"Long" futures contract to purchase silver:

Fixed purchase price (P1,600 x 400)	640,000	
Purchase price at current market price (P1,900 x 400)	760,000	
Receivable from broker		120,000

"Short" futures contract to sell coffee beans:

Fixed selling price (P250 x 2,000)	500,000	
Selling price at current market price (P220 x 2,000)	440,000	
Receivable from broker		60,000

"Short" futures contract to sell potatoes:

Fixed selling price (P60 x 3,000)	180,000	

Selling price at current market price (P75 x 3,000)	225,000	
Payable to broker		(45,000)
Net derivative asset		***95,000***

17. *Solutions:*

Case #1:

Purchase price using the option		50,000
Purchase price without the option (2M ÷ 35)		57,142
Savings from exercising the option - gross		7,142
Less: Cost of purchased option	(2,000)	
Net savings from call option		***5,142***

Case #2:

Purchase price using the option	50,000	
Purchase price without the option (1M ÷ 50)	40,000	
Savings from exercising the option - gross		-

ABC Co. would have been better off not to have purchased the call option.

18. *Solution:*

Sale price using the option (P220 x 40,000)	8,800,000
Sale price without the option (P250 x 40,000)	10,000,000
Savings from exercising the option - gross	-

ABC Co. would have been better off not to have purchased the put option. Since options give the holder the ***right***, and ***not*** the obligation, to exercise the option, ABC Co. will simply ***write-off the cost of the option as loss***. Accordingly, ABC Co. will recognize ***P20,000 loss on the option*** in its 20x1 financial statements.

Answer: ***P20,000 loss on put option***

19. *Solutions:*

Requirement (a): Derivative asset (liability) – Dec. 31, 20x1

Fixed purchase price (P220 x 40,000)	8,800,000
Purchase price at current market price (P240 x 40,000)	9,600,000

Derivative asset - receivable from broker	***800,000***

Requirement (b): Unrealized gain (loss) on December 31, 20x1

Fair value of call option - July 1, 20x1 (cost)	20,000
Fair value of call option - Dec. 31, 20x1 (see computations above)	800,000
Unrealized gain - increase in fair value	***780,000***

Requirement (c): Net cash settlement on March 31, 20x2

Fixed purchase price (P220 x 40,000)	8,800,000
Purchase price at current market price (P250 x 40,000)	10,000,000
Net cash settlement - receipt	***1,200,000***

Requirement (d): Realized gain (loss) on March 31, 20x2.

March 31, 20x2	Cash (see Requirement 'c')	1,200,000	
	Call option (see Requirement 'a')		800,000
	Gain on call option *(squeeze)*		***400,000***
	to record the net settlement of the call option		

Alternative solution: (250 – 240) x 40,000 = ***400,000***

20. *Solutions:*

Case #1:

Requirement (a): Net cash settlement

	20x1	***20x2***
Receive variable (at Jan. 1 current rates)	200,000	160,000
Pay 10% fixed	200,000	200,000
Net cash settlement - (payment) (due on Dec. 31, 20x3)	***-***	***(40,000)***

Requirement (b): Fair value of derivative

Net cash settlement - (payment) (due on Dec. 31, 20x3)	(40,000)
PV of 1 @8%, n=1	0.9259

Fair value of interest rate swap - liability (payable)	***(37,036)***

Case #2:
Requirement (a): Net cash settlement

	20x1	***20x2***
Receive variable (at Jan. 1 current rates)	200,000	240,000
Pay 10% fixed	200,000	200,000
Net cash settlement – receipt (due on Dec. 31, 20x3)	***-***	***40,000***

Requirement (b): Fair value of derivative

Net cash settlement - receipt (due on Dec. 31, 20x3)	40,000
PV of 1 @12%, n=1	0.8929
Fair value of interest rate swap - asset (receivable)	***35,716***

21. *Solutions:*
Requirement (a):
Answer: **P2,000,000**. The notional amount is the principal amount of the loan covered by the hedging instrument.

Requirement (b):

Receive variable (2M x 9%)	180,000
Pay 8% fixed	160,000
Net cash settlement - receipt (due each year-end for the next four years)	20,000
Multiply by: ***PV ordinary annuity @9%, n=4***	3.23972
Fair value of forward contract – receivable	***64,794***

Requirement (c):

Receive variable (2M x 12%)	240,000
Pay 8% fixed	160,000
Net cash settlement - receipt (due each year-end for the next three years)	80,000
Multiply by: PV ordinary annuity @12%, n=3	2.40183
Fair value of forward contract - receivable	***192,146***

Chapter 25 – Accounting for Derivatives and Hedging Transactions (Part 4)

Multiple Choice – Theory

1. A
2. B
3. C
4. D
5. B

Multiple Choice – Computational

Answers at a glance:

1.	C	6.	A	11.	A	16.	D	21.	C	26.	A
2.	A	7.	***E***	12.	C	17.	C	22.	B	27.	B
3.	D	8.	A	13.	D	18.	***E***	23.	D	28.	B
4.	A	9.	B	14.	A	19.	D	24.	D	29.	A
5.	C	10.	C	15.	A	20.	A	25.	A	30.	D
										31.	A

Solutions:

1. C

Solution:

Receivable from XYZ, Inc. (in pesos)	₱4,000,000
Multiply by: Closing rate, Dec. 31, 20x1	2
Adjusted balance of Payable to ABC Co. (in AMD)	*8,000,000*
Payable to ABC Co. (in AMD) - unadjusted	7,000,000
Payable to ABC Co. (in AMD) - adjusted	8,000,000
FOREX loss in subsidiary's P/L (in AMD)	***(1,000,000)***

2. A

Solution:

XYZ's separate profit before FOREX loss (in AMD)	7,000,000
FOREX loss (in AMD)	(1,000,000)
XYZ's separate profit after FOREX loss (in AMD)	***6,000,000***

3. D
Solution:

1) Translation of XYZ's opening net assets:		
Net assets of sub., July 1 - at ***opening rate***	(12M ÷ 1.50)	8,000,000
Net assets of sub., July 1 - at ***closing rate***	(12M ÷ 2.00)	6,000,000
Decrease in opening net assets - loss		*(2,000,000)*
Cumulative translation difference - Jan. 1		-
2) Translation of changes in net assets during the period:		
Profit of subsidiary at ***average rate***	(6M ÷ 1.75)	3,428,571
Profit of subsidiary at ***closing rate***	(6M ÷ 2.00)	3,000,000
Decrease in profit – loss		(428,571)
3) Translation of goodwill:		
Goodwill, Dec. 31 - at ***opening rate***		-
Goodwill, Dec. 31 - at ***closing rate***		-
Increase (Decrease) in goodwill -gain (loss)		-
Total translation loss – OCI		***(2,428,571)***

4. A
Solution:

	ABC Co. (in pesos)	***XYZ, Inc. (in AMD) - unadjusted***	*Adjustments*	***XYZ, Inc. (in AMD) -adjusted***	***Rates***	***XYZ, Inc. (in pesos)***	*Consolidation*	***Consolidated***
Assets	56,000,000	40,000,000		40,000,000	2	20,000,000	(56M + 20M)	76,000,000
Investment in subsidiary	8,000,000	-		-			*(eliminated)*	-
Receivable from XYZ	4,000,000	-		-			*(eliminated)*	
Total assets	*68,000,000*	*40,000,000*		*40,000,000*		20,000,000		***76,000,000***
Liabilities	32,000,000	14,000,000		14,000,000	2	7,000,000	(32M + 7M)	39,000,000
Payable to ABC Co.	-	7,000,000	1,000,000	8,000,000	2	4,000,000	*(eliminated)*	
Total liabilities	*32,000,000*	*21,000,000*		*22,000,000*		11,000,000		*39,000,000*
Equity - July 1, 20x1	16,000,000	12,000,000		12,000,000		*(omitted)*	*(parent only)*	16,000,000
Profit for the year	20,000,000	7,000,000	(1,000,000)	6,000,000	1.75	3,428,571	(20M+ 3,428,571)	23,428,571
Translation loss – OCI							*(see above)*	*(2,428,571)*
Total equity – Dec. 31	*36,000,000*	*19,000,000*		*18,000,000*	2	9,000,000		***37,000,000***
Total liabilities & equity	*68,000,000*	*40,000,000*		*40,000,000*		*20,000,000*		*76,000,000*

The 1,000,000 ***adjustments*** pertain to the FOREX loss on the intercompany payable which is recognized in the subsidiary's separate profit or loss. Notice that the even though the intercompany accounts have been eliminated, the FOREX loss remains in the consolidated total equity

5. C (See solution above)

6. A
Solution:
Hedging instrument:
The fair value of the forward contract on July 1, 20x1 is ***zero***.

The fair value of the forward contract on December 31, 20x1 is computed as follows:

Sale price at ***6-month forward rate*** - *12/31/20x1* (20M ÷ 2.02)	9,900,990
Sale price at the pre-agreed forward rate (20M ÷ 1.54)	12,987,013
Difference	3,086,023
Multiply by: PV factor *(given)*	0.971286
Fair value of forward contract - Dec. 31, 20x1 (asset)	*2,997,411*

An *asset* is recognized because the sale price at the six-month forward rate is ₱9,900,990 but ABC can sell at a *higher price* of ₱12,987,013 – a condition that is ***favorable*** to ABC.

The gain (loss) on the forward contract is computed as follows:

Fair value of forward contract - July 1, 20x1	-
Fair value of forward contract - Dec. 31, 20x1	2,997,411
Increase in fair value - Unrealized gain in OCI (gross of tax)	2,997,411
Less: Deferred tax liability (2,997,411 x 40%)	(1,198,964)
Unrealized gain in OCI (net of tax)	*1,798,447*

The ***net*** translation gain (loss) to be recognized in ***other comprehensive income*** is computed as follows:

Total translation loss – OCI (without hedging - see *Case #1*)	(2,428,571)
Unrealized gain in OCI - net of tax	1,798,447
Total FOREX translation loss - OCI (with hedging)	***(630,124)***

7. **E**
CORRECTION: Dear Sir/Ma'am: The correct answer was omitted from the answer choices. I am sorry for the error. The CORRECT ANSWER is *78,997,411* (See solution below)

Solution:

Hedging instrument – Forward contract (Derivative)
July 1, 20x1 No entry
Dec. 31, 20x1 Forward contract….2,997,411 Deferred tax liability…..... 1,198,964 Accumulated OCI……. 1,798,447 *to recognize the change in the fair value of the forward contract*

	Consolidated (without hedging)	***Journal entry on hedging instrument***	***Consolidated (with hedging)***
Total assets	76,000,000	2,997,411	***78,997,411***
Total liabilities	*39,000,000*	1,198,964	*40,198,964*
Equity - July 1, 20x1	16,000,000		16,000,000
Profit for the year	23,428,571		23,428,571
Translation loss – OCI	*(2,428,571)*	1,798,447	*(630,124)*
Total equity – Dec. 31	*37,000,000*		**38,798,447**
Total liab. & equity	*76,000,000*		*78,997,411*

8. A (See solution above)

9. B

Solution:

Fixed selling price	100,000
Selling price at current spot rate (4M ÷ 35)	114,286
Excess – ***payment*** to broker	***(14,286)***

10. C

Solution:

Fixed selling price	100,000
Selling price at current spot rate (4M ÷ 50)	80,000
Deficiency - ***receipt*** from broker	***20,000***

11. A
Solution:

Fixed selling price	100,000
Selling price at current spot rate (4M ÷ 45)	88,888
Fair value of forward contract – receivable (asset)	***11,111***

12. C
Solution:

Fixed purchase price (₱2,400 x 1,000)	2,400,000
Purchase price at current mkt. price (₱2,800 x 1,000)	2,800,000
Derivative asset - receivable from broker	***400,000***

13. D
Solution:

Fixed purchase price (₱2,400 x 1,000)	2,400,000
Purchase price at current mkt. price (₱2,200 x 1,000)	2,200,000
Derivative liability - payable to broker	***(200,000)***

14. A ***₱20,000,000*** (100,000 kilos notional figure x ₱200 forward price)

15. A
Solution:

Fixed purchase price (100,000 x ₱200)	20,000,000
Purchase price at current mkt. price (100,000 x ₱260)	26,000,000
Receivable from broker	*6,000,000*
Multiply by: PV of 1 @10%, n=1	0.90909
Fair value of forward contract (asset)	***5,454,540***

16. D

Solution:

Fixed purchase price (100,000 x ₱200)	20,000,000
Purchase price at current mkt. price (100,000 x ₱160)	16,000,000
Payable to broker	*(4,000,000)*
Multiply by: PV of 1 @10%, n=0	1
Fair value of forward contract (liability)	***(4,000,000)***

17. C

Solution:

"Long" futures contract to purchase gold:		
Fixed purchase price (₱2,000 x 400)	800,000	
Purchase price at current market price (₱1,800 x 400)	720,000	
Payable to broker		(80,000)
"Long" futures contract to purchase silver:		
Fixed purchase price (₱1,600 x 800)	1,280,000	
Purchase price at current market price (₱1,900 x 800)	1,520,000	
Receivable from broker		240,000
"Short" futures contract to sell coffee beans:		
Fixed selling price (₱250 x 4,000)	1,000,000	
Selling price at current market price (₱220 x 4,000)	880,000	
Receivable from broker		120,000
"Short" futures contract to sell potatoes:		
Fixed selling price (₱60 x 6,000)	360,000	
Selling price at current market price (₱75 x 6,000)	450,000	
Payable to broker		(90,000)
Net derivative asset		***190,000***

18. **E**

CORRECTION: Dear Sir/Ma'am: The correct answer was omitted from the answer choices. I am sorry for the error. The CORRECT ANSWER is ***10,286*** **(See solution below)**

Solution:

Purchase price using the option	100,000
Purchase price without the option (4M ÷ 35)	114,286
Savings from exercising the option - gross	14,286
Less: Cost of purchased option	(4,000)
Net savings from call option	***10,286***

19. D

20. A ***40,000 – the cost of option***

21. C

Solution:

Fixed purchase price (₱880 x 20,000)	17,600,000
Purchase price at current market price (₱960 x 20,000)	19,200,000
Derivative asset - receivable from broker	***1,600,000***

22. B

Solution:

Fair value of call option - July 1, 20x1 *(cost)*	40,000
Fair value of call option - Dec. 31, 20x1 *(see above)*	1,600,000
Unrealized gain - increase in fair value	***1,560,000***

23. D

Solution:

Fixed purchase price (₱880 x 20,000)	17,600,000
Purchase price at current market price (₱1,000 x 20,000)	20,000,000
Net cash settlement - receipt	***2,400,000***

24. D

Solution:

March 31, 20x2	Cash (see above)	2,400,000	
	Call option (see above)		1,600,000
	Gain on call option *(squeeze)*		***800,000***
	to record the net settlement of the call option		

25. A

Solution:

	20x1	***20x2***
Receive variable (at Jan. 1 current rates)	400,000	320,000
Pay 10% fixed	400,000	400,000
Net cash settlement - (payment) *(due on Dec. 31, 20x3)*	***-***	***(80,000)***

26. A

Solution:

Net cash settlement - (payment) *(due on Dec. 31, 20x3)*	(80,000)
Multiply by: PV of 1 @8%, n=1	0.9259
Fair value of interest rate swap - liability	***(74,072)***

27. B

Solution:

	20x1	***20x2***
Receive variable (at Jan. 1 current rates)	400,000	480,000
Pay 10% fixed	400,000	400,000
Net cash settlement – receipt (due on Dec. 31, 20x3)	***-***	***80,000***

28. B

Solution:

Net cash settlement - receipt *(due on Dec. 31, 20x3)*	80,000
Multiply by: PV of 1 @12%, n=1	0.8929
Fair value of interest rate swap - asset	***71,432***

29. A ***4,000,000*** – the principal amount of the loan

30. D

Solution:

Receive variable (4M x 9%)	360,000
Pay 8% fixed	320,000
Net cash settlement - receipt (due annually for the next 4 yrs.)	40,000
Multiply by: PV ordinary annuity @9%, n=4	3.23972
Fair value of forward contract – asset	***129,589***

31. A

Solution:	
Receive variable (4M x 12%)	480,000
Pay 8% fixed	320,000
Net cash settlement - receipt (due annually for the next 4 yrs.)	160,000
Multiply by: PV ordinary annuity @12%, n=3	2.40183
Fair value of forward contract - receivable	***384,293***

Chapter 26 – Corporate Liquidation and Reorganization

Multiple Choice – Theory

1.	D	6.	D	11.	B	16.	D	21.	A	26.	C
2.	D	7.	E	12.	C	17.	B	22.	C	27.	B
3.	A	8.	B	13.	A	18.	D	23.	A	28.	C
4.	D	9.	A	14.	D	19.	A	24.	C	29.	D
5.	D	10.	C	15.	C	20.	D	25	B	30.	C

Multiple Choice – Computational

Answers at a glance:

1.	C	6.	B	11.	D	16.	A	21.	B	26.	D	31.	D
2.	A	7.	A	12.	B	17.	B	22.	A	27.	C	32.	C
3.	B	8.	D	13.	A	18.	A	23.	B	28.	B	33.	A
4.	D	9.	B	14.	C	19.	C	24.	B	29.	B	34.	A
5.	A	10.	C	15.	D	20.	C	25.	C	30.	A	35.	D
												36.	A

Solutions:

1. C Land and building at net selling price of ***10,400,000***

2. A Equipment at net selling price of ***800,000***

3. B

Solution:

Assets pledged to fully secured creditors:	***Realizable value***	***Available for unsecured creditors***
Land and building	10,400,000	
Less: Loan payable	(8,000,000)	
Interest payable	(60,000)	2,340,000

Assets pledged to partially secured

creditors:		
Equipment, net	800,000	-
Free assets:		
Cash	160,000	
Accounts receivable	668,800	
Note receivable	400,000	
Interest receivable	40,000	
Inventory	1,640,000	
Prepaid assets	-	2,908,800
Total free assets		***5,248,800***

4. D

Solution:

Unsecured liabilities with priority:	***Secured and Priority claims***	***Unsecured liabilities without priority***
Estimated admin. expenses	120,000	
Accrued salaries	100,000	
Current tax payable	1,400,000	
Total unsecured liabilities with priority	1,620,000	-
Fully secured creditors:		
Loan payable	8,000,000	
Interest payable	60,000	
	8,060,000	-
Partially secured creditors:		
Note payable	1,200,000	
Less: Equipment	(800,000)	400,000
Unsecured liabilities without priority:		
Accrued expenses, net of accrued salaries (884K – 100K)	784,000	
Accounts payable	4,000,000	4,784,000
Total unsecured liabilities without priority		***5,184,000***

Total free assets	5,248,800
Less: Total unsecured liabilities ***with*** priority	(1,620,000)
Net free assets	***3,628,800***

5. A (See solution above)

6. B (See solution above)

7. A (See solution above)

8. D (See solution above)

9. B

Solution:

Total unsecured liabilities w/o priority (see above)	5,184,000
Multiply by: (100% - 70%* recovery)	30%
Deficiency	***1,555,200***

* See computation below.

10. C

Solution:

Estimated recovery percentage of unsecured creditors without priority = Net free assets / Total unsecured liabilities without priority

Total free assets	5,248,800
Less: Total unsecured liabilities ***with*** priority	(1,620,000)
Net free assets	***3,628,800***
Divide by: *Total unsecured liabilities* ***without*** *priority*	***5,184,000***
Estimated recovery percentage of unsecured creditors without priority	***70%***

11. D

12. B

Solution:

Jan. 1, 20x1	Cash	160,000	
	Accounts receivable	880,000	
	Note receivable	400,000	
	Inventory	2,120,00	
	Prepaid assets	0	
	Land	40,000	
	Building	2,000,00	
	Equipment	0	
	Estate deficit (squeeze)	8,000,00	
	Accrued expenses	0	884,000

	Current tax payable Accounts payable Note payable Loan payable	1,200,000 ***684,000***	1,400,000 4,000,000 1,200,000 8,000,000

13. A
Solution:
Assets to be realized is ***₱14,640,000***, equal to the total book value of the assets, ***excluding cash***, transferred to the receiver (₱14,840,000 total assets *less* ₱160,000 cash).

14. C
Solution:
Assets acquired is ***₱40,000***, representing the previously unrecorded ***interest receivable***.

15. D
Solution:
Assets realized is equal to the ***actual net proceeds*** from the sale of assets, as summarized below:

a. Collection of accounts receivable	660,000
b. Collection of note and interest receivables	400,000
c. Sale of half of the inventory	1,180,000
e. Sale of land and building	10,400,000
f. Sale of equipment	880,000
Assets realized	***13,520,000***

16. A
Solution:
Assets not realized is equal to the book value of the unsold inventory of ***₱1,060,000*** (₱2,120,000 x 50%).

17. B
Solution:
Liabilities to be liquidated is ***₱15,484,000***, equal to the total book value of the liabilities transferred by ABC Co. to the receiver.

18. A
Solution:
Liabilities assumed is ***₱60,000***, representing the previously unrecorded ***interest payable***.

19. C

Solution:

Liabilities liquidated is equal to the ***actual settlement amounts*** of the liabilities settled, as summarized below:

g. Payment for accrued salaries	100,000
h. Payment for current tax payable	1,400,000
i. Payment for interest and loan payables	8,060,000
j. Payment for note payable	880,000
Liabilities liquidated	***10,440,000***

20. C

Solution:

Liabilities to be liquidated is equal to the total book value of the unsettled liabilities summarized below:

Accrued expenses, net of accrued salaries	784,000
Accounts payable	4,000,000
Liabilities to be liquidated	***4,784,000***

21. B

Solution:

	Debits	***Credits***	
Assets to be realized, *excluding cash*	14,640,000	13,520,000	Assets realized
Assets acquired	40,000	1,060,000	Assets not realized
Liabilities liquidated	10,440,000	15,484,000	Liabilities to be liquidated
Liabilities not liquidated	4,784,000	60,000	Liabilities assumed
Supplementary expenses	108,000	-	Supplementary income
Totals	30,012,000	30,124,000	*Totals*
Net gain - excess credits over debits	***112,000***		

****Supplementary expense*** is equal ***₱108,000***, representing the ***administrative expenses paid*** during the period.

22. A

Solution:

	Claim	***Recovery percentage***	***Estimated recovery***
• Government - unsecured	400,000	100%	*400,00*

liability with priority			*0*
• XYZ Bank - fully secured creditor	4,200,000	100%	*4,200,000*
• Alpha Financing Co. - ***partially secured creditor***	3,200,000	2M + (1.2M x 40%*)	***2,480,000***
• Mr. Bombay - unsecured liability without priority	1,200,000	40%*	*480,000*

*(40% = 288,000 ÷ 720,000)

23. B (See solution above)

24. B

Solution:

Total assets at realizable values	1,248,000
Less: Unsecured creditors with priority	(288,000)
Fully secured creditors	(384,000)
Realizable value of assets pledged to partially secured creditors	(192,000)
Net free assets	***384,000***

25. C

Solution:

$$\textbf{\textit{Estimated recovery percentage of unsecured creditors without priority}} = \frac{\text{Net free assets}}{\text{Total unsecured liabilities without priority}}$$

Unsecured creditors without priority	432,000
Deficiency of assets pledged to partially secured creditors (240K – 192K)	48,000
Total unsecured liabilities without priority	***480,000***

Estimated recovery percentage =
384,000 *(see previous computation)* ÷ 480,000 = ***80%***

26. D

Solution:

Net free assets	384,000
Less: Total unsecured liabilities without priority	(480,000)

Estimated deficiency to unsecured creditors without priority	***(96,000)***

27. C
Solution:

	Claim	*Recovery percentage*	*Estimated recovery*
Unsecured liability with priority	288,000	100%	*288,000*
Fully secured creditor	384,000	100%	*384,000*
Partially secured creditor	240,000	48K + (48K x 58%)	***230,400***
Unsecured liability without priority	432,000	80%	*345,600*
Total			*1,248,000*

28. B (See solution above)

29. B
Solution:
Since only the results of the liquidation process are provided in the problem, we need to reconstruct the information on assets and liabilities using the provided information on equity. This information can be determined using the basic accounting equation.

Assets *less* Liabilities *(at book value)*		**Capital** *(at book value)*
1,600,000 ***(squeeze)***	=	*1,600,000* (2.8M – 1.2M)

The recovery percentage of shareholders is computed as follows:

Assets less Liabilities at book value	1,600,000
Gains on realization of assets	720,000
Losses on realization of assets	(1,280,000)
Additional assets discovered and realized during liquidation	200,000
Additional liabilities recorded and settled during liquidation	(120,000)
Net assets available to shareholders	***1,120,000***
Divide by: Book value of shareholders' equity	1,600,000
Recovery percentage of shareholders	***0.70***

30. A *Answer:* ***₱800,000*** (1M x 20% recovery of inside creditors)

31. D – ***None*** – Before anything can be paid to owners, all of the claims of creditors, outside and inside, must be paid first. Since inside creditors are not paid in full, none will be paid to owners.

32. C

Solution:

The net free assets are computed as follows:

Amount realized from sale of assets	3,760,000
Amount paid out of the proceeds (540K + 370K)	(3,640,000)
Realizable value of remaining assets (320K+140K+515K)	3,900,000
Total assets at realizable values	*4,020,000*
Less: Unsecured creditors with priority (260K + 40K estimated liquidation expenses)	(1,200,000)
Fully secured creditors ***(limited to realizable value of collateral)*** - ***(error)*** [a]	(1,280,000)
Realizable value of asset pledged to partially secured creditors	(560,000)
Net free assets	***980,000***

The total unsecured liabilities without priority are computed as follows:

Unsecured creditors without priority (1.76M+200K)	1,960,000
Deficiency of assets pledged to "fully" secured creditors ***(error)*** [a]	160,000
Deficiency of assets pledged to to partially secured creditors [(2.080M – 1.48M) - 560K]	40,000
Total unsecured liabilities without priority	***2,160,000***

[a] The assets described in the accountant's working papers as ***"pledged to fully secured creditors"*** are actually ***"pledged to partially secured creditors"*** (also, the 'fully secured creditors' are actually 'partially secured') as shown in the computations below:

Unpaid balance of fully secured liabilities (3.6M – 2.16M)	1,440,000
Assets pledged to fully secured creditors	1,280,000
Deficiency to "fully" secured creditors	*160,000*

$$\text{Estimated recovery percentage of unsecured creditors without priority} = \frac{\text{Net free assets}}{\text{Total unsecured liabilities without priority}}$$

= (980,000 ÷ 2,160,000) = ***45.37%***

33. A

Solution:

Date			
	Various assets (at book value)	1,200,000	
	Estate deficit (squeeze)		
	Various liabilities (at book value)	***80,000***	1,280,000

34. A

Solution:

Total assets at realizable value (1M + 20K dividend receivable)	1,020,000
Total liabilities at realizable value (1.28M + 8K interest payable + 40K estimated administrative expenses)	(1,328,000)
Estimated deficiency to unsecured creditors without priority	***(308,000)***

35. D

Solution:

	Debits	***Credits***	
Assets to be realized	8,000,000	4,720,000	Assets realized
Assets acquired	60,000	880,000	Assets not realized
Liabilities liquidated	8,520,000	11,480,000	Liabilities to be liquidated
Liabilities not liquidated	4,760,000	128,000	Liabilities assumed
Supplementary expenses	100,000	72,000	Supplementary income
Totals	21,440,000	17,280,000	*Totals*
		4,160,000	***Net Loss – excess of debits over credits***

36. A

Solution:

ASSETS		***(Squeeze)***	***LIABILITIES AND EQUITY***		
Cash	***400,000***		Liabilities not liquidated	4,760,000	***(Start)***
Assets not realized	880,000		Estate deficit	(3,480,000)	↓
	1,280,000				
TOTALS	*0*	←	*TOTALS*	*1,280,000*	

Exercises

1. Solution:

Book values	**ASSETS**	*Realizable values*	*Available for unsecured creditors*
	Assets pledged to fully secured creditors:		
5,000,000	Land and building	5,200,000	
	Loan payable	(4,000,000)	
	Interest payable	(30,000)	1,170,000
	Assets pledged to partially secured creditors:		
600,000	Equipment, net	400,000	-
	Free assets:		
80,000	Cash	80,000	
440,000	Accounts receivable	334,400	
200,000	Note receivable	200,000	
-	Interest receivable	20,000	
1,060,000	Inventory	820,000	
20,000	Prepaid assets	-	1,454,400
	Total free assets		2,624,400
	Less: Unsecured liabilities with priority *(see below)*		(810,000)
	Net free assets		*1,814,400*
	Estimated deficiency ***(squeeze)*** (1,296,000 - 907,200)		388,800
7,400,000			*2,592,000*

Book values	**LIABILITIES AND EQUITY**	*Realizable values*	*Unsecured non-priority liabilities*
	Unsecured liabilities with priority:		
-	Administrative expenses	60,000	
50,000	Accrued salaries	50,000	
700,000	Current tax payable	700,000	
	Total unsecured liabilities with priority	810,000	-
	Fully secured creditors:		
4,000,000	Loan payable	4,000,000	
	Interest payable	30,000	-
	Partially secured creditors:		

600,000	Note payable	600,000	
	Equipment, net	(400,000)	200,000
	Unsecured creditors		
392,000	Accrued expenses, net of accrued salaries	392,000	
2,000,000	Accounts payable	2,000,000	2,392,000
	Total unsecured creditors		2,592,000
(342,000)	**Shareholders' equity**	-	-
7,400,000			*2,592,000*

2. Solutions:

Requirement (a):

Jan. 1, 20x1	Cash	80,000	
	Accounts receivable	440,000	
	Note receivable	200,000	
	Inventory	2,120,00	
	Prepaid assets	0	
	Land	20,000	
	Building	1,000,00	
	Equipment	0	
	Estate deficit (squeeze)	4,000,00	
	Accrued expenses	0	442,000
	Current tax payable	600,000	700,000
	Accounts payable	***342,000***	2,000,00
	Note payable		0
	Loan payable		600,000
			4,000,00
			0

Requirement (b):

ASSETS

Assets to be realized:		***Assets realized:***	
Accounts receivable	440,000	Accounts receivable	330,000
Note receivable	200,000	Note receivable	180,000
Inventory	1,060,000	Interest receivable	20,000
Prepaid assets	20,000	Inventory	590,000
Land and building	5,000,000	Land and building	5,200,000
Equipment, net	600,000	Equipment	440,000
Total	*7,320,000*	*Total*	*6,760,000*

Assets acquired: ***Assets not realized:***

Interest receivable	*20,000*	Inventory	*530,000*

LIABILITIES

Liabilities liquidated:		***Liabilities to be liquidated:***	
Accrued expenses	50,000	Accrued expenses	442,000
Current tax payable	700,000	Current tax payable	700,000
Interest payable	30,000	Accounts payable	2,000,000
Loan payable	4,000,000	Note payable	600,000
Note payable	440,000	Loan payable	4,000,000
Total	*5,220,000*	*Total*	*7,742,000*

Liabilities not liquidated:		***Liabilities assumed:***	
Accrued expenses	392,000	Interest payable	*30,000*
Accounts payable	2,000,000		
Total	*2,392,000*		

SUPPLEMENTARY ITEMS

Supplementary expenses:		***Supplementary income:***	
Administrative expenses	*54,000*		-
Net gain during the period	*56,000*		
	15,062,000		*15,062,000*

Requirement (c):

Cash

Beg. bal.	80,000		
Assets realized	6,760,000	5,220,000	
		0	Liabilities liquidated
		54,000	Administrative expenses
		1,566,000	

3. Solution:

	Claim	***Recovery percentage***	***Estimated recovery***
• Government - unsecured liability with priority	200,000	100%	***200,000***
• XYZ Bank - fully secured creditor	2,100,000	100%	***2,100,000***
• Alpha Financing Co. - partially secured creditor	1,600,000	500K + (300K x 40%*)	***1,240,000***
• Mr. Bombay - unsecured liability without priority	600,000	40%*	***240,000***

*(40% = 144,000 ÷ 360,000)

4. Solution:

Requirement (a):

Total assets at realizable values	624,000
Less: Unsecured creditors with priority	(144,000)
Fully secured creditors	(192,000)
Realizable value of assets pledged to partially secured creditors	(96,000)
Net free assets	***192,000***

Requirement (b):

Estimated recovery percentage of unsecured creditors without priority = Net free assets ÷ Total unsecured liabilities without priority

Unsecured creditors without priority	108,000
Deficiency of assets pledged to partially secured creditors (60K – 48K)	12,000
Total unsecured liabilities without priority	***120,000***

Estimated recovery percentage =
96,000 *(see previous computation)* ÷ 120,000 = ***80%***

Requirement (c):

Net free assets	192,000
Less: Total unsecured liabilities without priority	(240,000)
Estimated deficiency to unsecured creditors without priority	***(48,000)***

Requirement (d):

	Claim	***Recovery percentage***	***Estimated recovery***
Unsecured liability with priority	144,000	100%	***144,000***
Fully secured creditor	192,000	100%	***192,000***
Partially secured creditor	120,000	48K + (24K x 58%)	***115,200***
Unsecured liability without priority	216,000	80%	***172,800***

Total	*624,000*

5. Solution:

Since only the results of the liquidation process are provided in the problem, we need to reconstruct the information on assets and liabilities using the provided information on equity. This information can be determined using the basic accounting equation.

Assets *less* Liabilities *(at book value)*	**=**	**Capital** *(at book value)*
800,000 ***(squeeze)***	=	*800,000* (1.4M – 600K)

The recovery percentage of shareholders is computed as follows:

Assets less Liabilities at book value	800,000
Gains on realization of assets	360,000
Losses on realization of assets	(640,000)
Additional assets discovered and realized during liquidation	100,000
Additional liabilities recorded and settled during liquidation	(60,000)
Net assets available to shareholders	***560,000***
Divide by: Book value of shareholders' equity	800,000
Recovery percentage of shareholders	***0.70***

6. Solution:

Requirement (a):

Answer: ***₱400,000*** (2M x 20% recovery of inside creditors)

Requirement (b):

Answer: ***None*** – Before anything can be paid to owners, all of the claims of creditors, outside and inside, must be paid first. Since inside creditors are not paid in full, none will be paid to owners.

7. Solution:

The net free assets are computed as follows:

Amount realized from sale of assets	1,880,000
Amount paid out of the proceeds (1.080M + 740K)	(1,820,000)
Realizable value of remaining assets (640K+280K+1.030M)	1,950,000
Total assets at realizable values	*2,010,000*
Less: Unsecured creditors with priority (520K + 80K estimated liquidation expenses)	(600,000)
Fully secured creditors ***(limited to realizable value of collateral)*** - ***(error)*** [a]	(640,000)

Realizable value of asset pledged to partially secured creditors	(280,000)
Net free assets	***490,000***

The total unsecured liabilities without priority are computed as follows:

	980,00
Unsecured creditors without priority (880K+100K)	0
Deficiency of assets pledged to "fully" secured creditors	80,00
(error) [a]	0
Deficiency of assets pledged to to partially secured creditors [(1.040M-740K)-280K]	20,00
	0
	1,080,00
Total unsecured liabilities without priority	***0***

[a] The assets described in the accountant's working papers as ***"pledged to fully secured creditors"*** are actually ***"pledged to partially secured creditors"*** (also, the 'fully secured creditors' are actually 'partially secured') as shown in the computations below:

Unpaid balance of fully secured liabilities (1.8M – 1.080M)	720,000
Assets pledged to fully secured creditors	640,000
Deficiency to "fully" secured creditors	*80,000*

$$\textbf{Estimated recovery percentage of unsecured creditors without priority} = \frac{\text{Net free assets}}{\text{Total unsecured liabilities without priority}}$$

= (490,000 ÷ 1,080,000) = ***45.37%***

8. Solutions:

Requirement (a):

Date	Various assets (at book value)	600,000	
	Estate deficit (squeeze)	***40,000***	
	Various liabilities (at book value)		640,000

Requirement (b): Estimated deficiency to unsecured creditors

The estimated deficiency to unsecured creditors without priority in the statement of affairs is computed as follows:

Total assets at realizable value (500K + 10K dividend receivable)	510,000
Total liabilities at realizable value (640K + 4K interest payable + 20K estimated administrative expenses)	(664,000)
Estimated deficiency to unsecured creditors	***(154,000***

without priority ***)***

9. Solutions:

Requirement (a): Net gain (loss)

	Debits	***Credits***	
Assets to be realized	4,000,000	2,360,000	Assets realized
Assets acquired	30,000	440,000	Assets not realized
Liabilities liquidated	4,260,000	5,740,000	Liabilities to be liquidated
Liabilities not liquidated	2,380,000	64,000	Liabilities assumed
Supplementary expenses	50,000	36,000	Supplementary income
Totals	10,720,000	8,640,000	*Totals*
		2,080,000	***Net Loss – excess of debits over credits***

Requirement (b): Ending balance of cash

ASSETS			***LIABILITIES AND EQUITY***		
Cash	***200,000***	***(Squeeze)***	Liabilities not liquidated	2,380,000	***(Start)***
Assets not realized	440,000		Estate deficit	(1,740,000)	
TOTALS	*640,000*		*TOTALS*	*640,000*	