

## SOLUTION: ADVANCED FINANCIAL REPORTING, MAY 2014

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### SOLUTION 1(a)

Goodwill is only calculated when control is gained. In substance, it is like the previously held investment is disposed of and a 70% controlled investment acquired. The previously held investment is therefore fair valued and added to the subsequent consideration offered.

Goodwill acquired in the business combination:

	GHC
Consideration offered at acquisition date	216,000
Acquisition date fair value of previously held equity	236,000
	-----
	452,000
Net worth acquired [70% of 510,000]	357,000
	-----
Goodwill	95,000
	=====

### SOLUTION 1(b)

#### Consolidated Statement of Cash Flows for the Year ended 30 September 2013

	GHC'000	GHC'000
<i>Cash flows from operating activities</i>		
Profit before tax	5,575	1/2
Finance costs	175	1/2
Gain on sale of subsidiary	(500)	1/2
Income from associate	(575)	1/2
Depreciation	1,925	1/2
Impairment of goodwill [w1]	400	1 1/2
Gain on disposal of PPE [275-250]	(125)	1/2
Increase in inventory (w2)	(250)	1
Decrease in receivables (w2)	300	1
Decrease in payables (w2)	(325)	1
	-----	
	6,600	
Finance cost paid	(175)	1/2
Taxation paid (w3)	(900)	1
	-----	
Net cash inflows from operating activities	<u>5,525</u>	1/2
<i>Cash flows from investing activities</i>		
Sale proceeds from PPE	1,375	1/2
Purchase of PPE (W4)	(4,000)	1
Dividends received from associate (w5)	425	1
Acquisition of subsidiary (7500-400)	(7,100)	1/2
Sale of subsidiary (4,250-250)	4,000	1/2
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Net cash outflows from investing activities	<u>(5,300)</u>	1/2

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*Cash flows from financing activities*

Increase in loans (2500-1,500)	1,000	1/2
Dividends paid to members of parent company	(625)	1/2
Dividends paid to non-controlling shareholders	(250)	1/2
	-----	
Net cash inflow from financing activities	<u>125</u>	1/2
Increase in cash and cash equivalent during the year	350	1/2
Opening cash and cash equivalents	700	1/2
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Closing cash and cash equivalents	<u>1,050</u>	1/2
	=====	

Notes [in accordance with IAS7]

- (1) During the year, Boafo acquired 80% of the equity share capital of Grace Ltd paying cash consideration of GHC7,500,000. The fair value of Grace Ltd's net assets at acquisition was made up as follows:

	GHC000
Property, plant and equipment	6,400
Inventory	750
Receivables	1,200
Cash and cash equivalents	400
Trade payables	(1,100)
Taxation	(200)
	<u>7,450</u>

- (2) During the year, Boafo Ltd also disposed of its 60% equity shareholding in Saviour Ltd for cash proceeds of GHC4,250,000. At the date of disposal, the net assets of Saviour Ltd had carrying values in the consolidated statement of financial position as follows:

	GHC000
Property, plant and equipment	3,625
Inventory	825
Receivables	600
Cash and cash equivalents	250
Trade payables	(400)
	<u>4,900</u>

Reference to IAS 7

*An entity shall disclose, in aggregate, in respect of both acquisitions and disposals of subsidiaries or other business units during the period each of the following:*

- (a) *the total purchase or disposal consideration;*  
 (b) *the portion of the purchase or disposal consideration discharged by means of cash and cash equivalents;*  
 (c) *the amount of cash and cash equivalents in the subsidiary or business unit acquired or disposed of;*  
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(d) the amount of the assets and liabilities other than cash or cash equivalents in the subsidiary or business unit acquired or disposed of, summarized by each major category.

### Working [all figures are in GHC'000]

#### W. 1(a) Goodwill impairment

Balance b/f	9,250
Acquisition of subsidiary during the year	1,750
Disposal of subsidiary during the year	(950)
	-----
	10,050
Balance c/d	(9,650)
	-----
Goodwill impairment	400
	=====

#### W.1 (b) Goodwill of acquired subsidiary

Cost of investment	7,500
Fair value of NCI at acquisition	1,700
	-----
	9,200
Net assets of subsidiary	(7,450)
	-----
Goodwill at acquisition	1,750
	=====

#### W1 (c) Goodwill of disposed subsidiary

Cost of investment	3,000
NCI holding at fair value	1,600
Fair value of subsidiaries net assets at disposal	(3,650)
	-----
Goodwill at disposal	950
	=====

#### W.2 Movements in working capital elements

	Inventories	Receivables	Payables
Balance b/f	2,175	1,650	3,625
Acquisition of subsidiary	750	1,200	1,100
Disposal of subsidiary	(825)	(600)	(400)
	-----	-----	-----
Balance c/f	2,100	2,250	4,325
	-----	-----	-----
(Increase) /Decrease during the year	(250)	300	325
	=====	=====	=====

#### W.3 Taxation paid

Balance b/f [525+1,800]	2,325
Acquisition of subsidiary	200
Income statement charge	1,125
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	3,650

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	Balance c/d [750+2,000]	(2,750)
		-----
	Tax paid	900
		=====
<b>W.4</b>	<b>Purchase of PPE</b>	
	Balance b/f	8,125
	Revaluation gain	1,000
	Acquisition of subsidiary	6,400
	Depreciation	(1,925)
	Disposal of plant	(1,250)
	Disposal of subsidiary	(3,625)
		-----
	Balance c/d	(12,725)
		-----
	Purchase during the year	(4,000)
		=====
<b>W.5</b>	<b>Dividends received from Associate</b>	
	Investment in Associate b/f	2,700
	Share of profit of associate	575
	Other Comprehensive income from associate	250
		-----
	Balance c/d	(3,100)
		-----
	Dividend received	425
		=====

### SOLUTION 2(a)

#### Investment in debenture

Given that these debentures are planned to be held until redemption, they would be classed as a financial asset – investment held to maturity – held at amortized cost. This means that they are initially shown at their cost (including any transaction costs) and their value increased over time to the redemption value by applying a constant effective interest rate which takes into account not only the annual income due from the coupon, but also amortization of the redemption premium. Their value is reduced by distributions received, i.e. the interest income.

Consequently the amortized cost valuation of these debentures at the year end would be:

Year	Amortized	Interest @8.6%	Interest received	Amortized
2013	85,000	7,310	(4,000)	88,310

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	2014	88,310	7,595	(4,000)	91,905
<b>Income Statement extracts</b>			2013		2014
			GHC		GHC
Interest income			7,310		7,595
<b>Statement of Cash Flows</b>			2013		2014
			GHC		GHC
Operating Cash Flows/Investing Cash Flows					
Interest income received			4,000		4,000
Investing activities			85,000		-
<b>SOFP Extract as at 31 December</b>			2013		2014
			GHC		GHC
Investment in debenture			88,310		91,905

b)

The futures contract was entered into to protect the company from a fall in cocoa prices and hedge the value of the inventories. It is therefore a fair value hedge.

The inventories are recorded at their cost of GH¢26,000,000 (100,000 bags at GH¢260) on 1 July 2013.

The futures contract has a zero value at the date it is entered into and so no entry is made in the financial statements.

However, the existence of the contract and associated risk would be disclosed from that date in accordance with IFRS 7.

At the year end, the inventories must be shown at the lower of cost and net realizable value. Hence they will be shown at GH¢22,500,000 (100,000 bags at GH¢225) and a loss of GH¢3,500,000 [GHC26,000,000 - GHC22,500,000] recognized in profit or loss.

However, a gain has been made on the futures contract:

	GH¢
The company has a contract to sell on 31 March 2014 at GH¢275.	27,500,000
A contract entered into at the year end would sell at GH¢232.50 on 31 March 14	<u>23,250,000</u>
Gain (= the value the contract could be sold on for a third party)	<u>4,250,000</u>

The gain on the futures contract is also recognized in profit or loss:

Dr Future contract asset	GH¢4,250,000
Cr Profit or loss	GH¢4,250,000

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The net effect on profit or loss is a gain of GH¢750,000 (4,250,000 less 3,500,000) whereas without the hedging contract the whole loss of GH¢3,500,000 would have been the only impact on profit or loss.

### C) Accounting entries

		GH ¢	GH ¢
31.12.2011			
DEBIT	Profit or loss (Staff costs)	188,000	
CREDIT	Equity reserve (800 – 95) x 200 x ¢4 x 1/3)		188,000
31.12.2012			
DEBIT	Profit or loss (Staff costs) (W1)	201,333	
CREDIT	Equity reserve		201,333
31.12.2013			
DEBIT	Profit or loss (Staff costs) (W2)	202,667	
CREDIT	Equity reserve		202,667

#### Workings

1	Equity reserve at 31.12.2012		GH ¢
	Equity b/d	188,000	
	Equity c/d ((800 – 70 x 200 x ¢4 x 2/3)	<u>389,333</u>	
	<b>Increase in Reserve to Income Statement</b>	<u>201,333</u>	
2	Equity reserve at 31.12.2013		
	Equity b/d	389,333	
	Equity c/d ((800 – 40 – 20) x 200 x ¢4 x 3/3)	<u>592,000</u>	
	<b>Increase in Reserve to Income Statement</b>	<u>202,667</u>	

### SOLUTION 3(a)

#### COSA

The COSA represents that portion of the historical cost profit which must be consumed in replacing the inventory item sold so that trading can continue. Where practical difficulties arise in estimating replacement cost, a simple indexing system can be used.

The COSA is necessary to eliminate realized holding gains on inventory. It represents the **difference between the replacement cost and the historical cost of goods sold**. The exclusion of holding gains from current cost profit aims at maintaining the operating capacity of the entity.

#### MWCA

Where a company enjoys credit from its suppliers or grants credit to its customers, payments are effected at the end of the credit period at the replacement cost as at the beginning of the credit period. If a company measures profit as the excess of revenue over cost:

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- Outstanding payables protect the entity to some extent from price rise because the entity lags behind current prices in its payment
- Outstanding receivables, on the other hand, become a burden on profits in a period of rising prices because sales receipts would always relate to previous period's sales at a lower price.

The MWCA can therefore be a gain or a loss (depending on the level of outstanding payables and outstanding receivables [2 marks])

### Holding Gain

Holding gain relates to the **appreciation of the value of non-monetary asset** [inventory or an item of PPE] while being held for sale or for use. Holding gains are of two kinds:

**Realized holding gains** which result from the application of replacement cost values to the input of resources to the profit generation process. For example, depreciation charged under replacement cost accounting is GH¢80 million greater than that charged under historical cost accounting. Similarly, cost of goods sold under replacement cost is GH¢200 million greater than that charged under historical cost accounting. Both amounts represent holding gains realized by reason of the use or the sale of assets.

Unrealized holding gains which result from the increased value of assets held by the firm and remaining unused or unsold at the end of the accounting period.

### (b) Deprival Value

Deprival value is measured as **the lower of replacement cost and recoverable amount**. This is because if deprived of an asset, management have a choice as to whether or not to replace it. If they are economically rational, they will replace the asset only if they can generate a surplus either by resale or by use.

Asset	Replacement Cost GHC	Recoverable Amount GHC	Deprival Value GHC
A	700,000	900,000	<b>700,000</b>
B	1,000,000	950,000	<b>950,000</b>
C	750,000	1,200,000	<b>750,000</b>

### (c) (i) Indications of Going Concern Difficulties

Financial

- Net liability or net current liability position.
- Fixed-term borrowings approaching maturity without realistic prospects of renewal or repayment; or excessive reliance on short-term borrowings to finance long-term assets.
- Indications of withdrawal of financial support by creditors.
- Negative operating cash flows indicated by historical or prospective financial statements.
- Adverse key financial ratios.
- Substantial operating losses or significant deterioration in the value of assets used to generate cash flows.
- Arrears or discontinuance of dividends.
- Inability to pay creditors on due dates.
- Inability to comply with the terms of loan agreements.
- Change from credit to cash-on-delivery transactions with suppliers.

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- Inability to obtain financing for essential new product development or other essential investments.

Operating

- Management intentions to liquidate the entity or to cease operations.
- Loss of key management without replacement.
- Loss of a major market, key customer(s), franchise, license, or principal supplier(s).
- Labour difficulties.
- Shortages of important supplies.
- Emergence of a highly successful competitor.

(ii) Z score

		5,300		(W1)					
0.012	X <sub>1</sub>	=	-----	(W2) × 100%	=	0.012 × 3.87	=	0.05	
			137,000						
			17,500						
0.014	X <sub>2</sub>	=	-----	(W3) × 100%	=	0.014 × 12.77	=	0.18	
			137,000						
0.033	X <sub>3</sub>	=	-----	(W4) × 100%	=	0.033 × 7.45	=	0.25	
			10,200						
			137,000						
0.006	X <sub>4</sub>	=	-----	(W5) × 100%	=	0.006 × 192	=	0.55	
			28,800						
			15,000						
0.999	X <sub>5</sub>	=	-----	(W6)	=	1.0 × 0.73	=	0.73	
			100,000						
			137,000						
	Total Z score						-----	1.76	-----

The calculated score of 1.76 indicates that Steadfast is likely to become bankrupt if remedial measures are not taken to address the issues confronting the entity.

(iii) 
$$\text{Current ratio} = \frac{\text{Current assets } 54,600}{\text{Current liabilities } 49,300} = 1.11:1$$

This is less than the 'ideal' of 2.

Current assets - inventory     54,600 - 35,800



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Quick assets (acid) ratio =  $\frac{\text{Quick assets}}{\text{Current liabilities}} = \frac{\text{Quick assets}}{49,300} = 0.38 : 1$

which is very much less than the 'ideal' of 1.

The above suggests that the company could be at risk of being forced into liquidation.

This largely confirms the Z Score measure.

### (c) (ii) Workings [Figures in GHC'000]

#### 1 Total Assets

##### NCA

Equipment	38,000	
Premises	42,000	
Investment in shares	2,400	
	-----	82,400

##### CA

Trade receivables	14,800	
Inventories	35,800	
Cash	4,000	
	-----	54,600
		-----
		137,000
		=====

#### 2 Current Liabilities

Trade Payables	41,300
Current Tax Payable	7,000
Preference share dividend payable	1,000
	-----
	49,300
	=====

#### 3 Retained Earnings

Balance b/f	10,700
Profit for the year [after tax]	7,800
Preference dividend payable	(1,000)
	-----
	6,800
	-----
	17,500
	=====

#### 4 PBIT

Profit for the year [after tax]	7,800
Add: Tax	2,000
Interest [8% of 5,000]	400
	-----
	10,200

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### SOLUTION 4

#### (a) Calculation of amount available to shareholders in case of liquidation

		Sales proceeds GH¢000
Assets		
Property, plant and machine		40,000
Stock		18,000
Receivables (debtors)		<u>40,000</u>
Total proceeds		98,000
Less liabilities payable		
Over draft	30,000	
Sundry creditors	20,500	
Liquidation cost	<u>4,000</u>	<u>54,500</u>
Amount available to shareholders		<u>43,500</u>
Less preference capital		
Capital amount	50,000	
Dividend in arrears	9,000	<u>59,000</u>
Amount available to shareholders		
Preference shareholders		<u>43,500</u>
Ordinary shareholders		<u>0</u>

#### Conclusion

Ordinary shareholders will receive nothing while preference shareholders will receive GH¢43,500 out of GH¢59,000.

#### (b) KOOWOOD RECONSTRUCTED STATEMENT OF FINANCIAL POSITION

		GH¢000
Property, plant and machinery		65,000
C. A.		
Stock	20,000	
Receivables	40,000	
Bank	<u>15,000</u>	
	75,000	
Less current liabilities		
Trade payables		<u>54,500</u>
(Sundry creditors)	<u>20,500</u>	119,500
Financed by		
Stated capital		
Ordinary shares	(10,500 + 50,000)	60,500
10% preference share capital	(9,000 + 50,000)	<u>59,000</u>
		<u>119,500</u>

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### (c) Calculation of amounts available to shareholders in case of reconstructions

	GHC
Goodwill	(40,000)
Revaluation of fixed assets	19,500
Stock	(5,000)
Debtors	(5,000)
Income surplus	(35,000)
Capital surplus	40,000
Preference dividend	(9,000)
Reconstruction cost	<u>(5,000)</u>
Total capital loss	<u>39,500</u>

#### Allocation of capital loss

	GHC
Ordinary shareholders	30,500
Preference shareholders	9,000

#### Amount available

Ordinary shareholders		
Capital	50,000	
Less cost	<u>39,500</u>	10,500

Preference shareholders	50,000
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(d) The company should be reconstructed because the shareholders will all benefit from recovering full or part of their capital. In respect of liquidation, ordinary shareholders will receive nothing.

## SOLUTION 5

### 1. Net Asset Basis of valuation

Price per share = Net Assets available to equity/number of ordinary shares issued

#### List of Net Assets available to equity

Assets	GHC000
Freehold buildings	1,000,000
Plant & Machinery	500,000
Transportation equipment	5,000
Unquoted Investment	60,000
Inventories [135,000 – 25,000]	110,000
Trade Receivables [200,000 x 95%]	190,000
Quoted Investment	3,000
Bill Receivable [75,000 x 95%]	<u>71,250</u>
Cash	<u>60,250</u>
Total Assets	1,999,500

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Add Goodwill negative	(333,700)
Total Assets including goodwill	1,665,800
Less liabilities	
Preference shares capital	75,000
16% debenture	200,000
Tax [100,000 + 35,750]	135,000
Debenture interest	32,000
Bank overdraft	113,000
Trade payable	80,000
Dividend	<u>105,750</u>
	740,750
Net Assets available to equity	925,050

Price per share =  $\frac{925,050}{4,000,000}$

GHC0.23

NOTE:

- 1) Instead of 2012 Net Profit some students may use simple average profits given or weighted average profit.
- 2) The profit was properly stated whether it was after tax or before tax.

### WORKINGS

Calculation of goodwill

Adjusted profit	GHC
Profit for 2012	200,000
Less stock loss	(25,000)
Less debenture interest (16% x 200, 000)	<u>(32,000)</u>
	143,000
Less taxation 25%	<u>(35,750)</u>
Net profit after tax	107,250
Less preference dividend (14% x 75,000)	<u>(10,500)</u>
Profit available to equity	96,750
Total assets	1,999,500
Less liabilities	<u>740,750</u>
Net assets	1,258,750 x 11%
	138,463
Super loss	- 41,713
Goodwill [41,713 x 8]	333,700

This is negative goodwill

**2. Price Earnings Basics of Valuation**

1.  $MV = P/E \text{ ratio} \times EPS$
2. P/E ratio of similar quoted company is given as 17 times

Students may choose to discount it to cover the risk of valuing an unlisted company. Some students may use P/E ratio below 17 times Which is acceptable.

Calculation of EPS

Net profit for 2012	200,000
Less debenture interest	(32,000)
Stock loss	(25,000)
Taxation as calculated	(35,750)
Net dividend	<u>(10,500)</u>
Net profit available to equity	<u>96,750</u>

$$EPS = \frac{96,750}{4,000,000}$$

$$= 0.024$$

Some students may also use simple or weighted average for calculating the EPS

$$MV = 17 \times 0.024 = 0.41$$

**3. Earnings Yield Basis of Valuation**

1. Price per shares =  $\frac{EPS}{\text{Earnings Yield}}$

Earnings Yield is the reciprocal of P/E ratio or

2. Earnings Yield =  $\frac{EPS}{PPS} \times 100\%$

Since the P/E ratio of similar quoted company is given as 17 times, its earnings yield would be

$$\frac{1}{P/E \text{ ratio}} = \frac{1}{17} \times 100\%$$
$$= 5.88\%$$

The 11% given is return on capital employed. Earnings yield is return on stock price in the market. This is why the difference is huge.

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Calculation of EPS already calculated as GH¢0.024

$$\text{Price per share} = \frac{0.024}{0.0588}$$

GH¢0.408

Some students may indicate that P/E ratio basis and Earnings basis are the same. They are right. Others may use the 11% given since there is no sufficient information on pricing of the shares in the similar quoted company.