THE INSTITUTE OF COST AND MANAGEMENT ACCOUNTANTS OF BANGLADESH
CMA JUNE, 2018 EXAMINATION
MANAGEMENT LEVEL
SUBJECT: F2. FINANCIAL MANAGEMENT

Model Solution

Solution of Q. No. 1:

(i) IFRS 8 *Operating segments* require that segmental information be provided by listed entities. Clearly FNE is looking to list and hence IFRS 8 will be applicable. The disclosures required are indeed extensive and should the information need to be compiled from scratch then this is likely to be time-consuming and costly.

However, the essence of IFRS 8 is that the entity should utilize information prepared for internal decision making. Therefore, in accordance with IFRS 8, it is the directors who decide which components of the business are reportable segments and these segments should be the individual parts of the business that the chief operating decision maker reviews in order to make financial and economic decisions. The entity will therefore already have prepared the financial information for these parts of the business for internal management purposes and so the costs of compliance should be minimal.

(ii)
(a) **Relevance to investors (advantages)**
In accordance with IFRS 8, the operating segment analysis will reflect the information used by the chief operating decision maker of the entity to make economic decisions about the business. Therefore, investors get to view what the decision makers within the entity think is important and also get an idea of how good/bad their decision making is. This will help investors to make investment decisions which are based upon their assessment of and confidence in the management team.

Many listed entities engage in varied activities and operating segment analysis could help explain the breakdown of the business activities and the principal risks affecting performance. This again will help investors to make decisions.

IFRS 8 also requires that entities provide information on major customers and a geographical split of results and resources. Again this information is likely to be relevant to investors as it provides detail which is not evident in the main financial statements.

Since 75% of total reported revenue must be covered by operating segment analysis, the information provided is likely to be highly relevant as it covers the majority of the business.

(b)**Limitations**
Since it is management that decides on which segments are reported, no two entities will necessarily use the same criteria. Therefore there is a lack of comparability between entities.

There is also a risk that entities will conceal information by the way they define the reportable segments.

Solution of Q. No. 2:

Asset sale:
IAS 1 (Revised) Presentation of Financial Statements requires that financial statements must reflect the economic substance of transactions and not merely their legal form, where economic substance is determined by considering who holds the principal risks and benefits associated with in this case an asset.
Despite the sale of the land, Concord Group must buy the land back within 2 years at a higher price than it sold it for. In addition, the value that the land has been sold for at Tk. 6,000,000 is lower than its market value on the sale date. These two factors together with the fact that the purchaser, CW, is unable to use the land without explicit approval from Concord Group, means that in substance Concord Group still holds the principal risks and benefits of the land (being exposure to changes in the market value of the land and control over how the land is used). In essence this is a financing arrangement where Tk. 6,000,000 has been raised using the land as security. The accounting entry given in the question should be reversed (i.e.: the asset should not be de-recognized, no gain or loss should be recorded) and a liability of Tk. 6,000,000 recorded in the financial statements for the year up to 31 December 2013.

Solution of Q. No. 3:

Fair value measurement techniques

The valuation technique used to re-measure the investment in Concord Ready Mix Concrete is a level 1 input as the share price used is an accessible, reliable and verifiable measure. By definition level 1 input share quoted prices in active markets for identical assets, which clearly applies when an entity's shares are quoted on a stock market.

In the case of an investment in an unlisted entity, Concord Group could use:
• a level 2 input such as the share price of a similar entity that was listed; or
• a level 3 input such as the present value of the entity's future cash flows using DCF valuation techniques.

Solution of Q. No. 4:

The liability component is valued first, and the difference between the proceeds of the bond issue and the fair value of the liability is assigned to the equity component. The present value of the liability component is calculated using a discount rate of 9%, the market interest rate for similar bonds having no conversion rights, as shown.

	Tk.
Present value of the principal: $2,000,000 payable at the end of three years (Tk2m *0.772183)	1,544,367
Present value of the interest: $120,000 payable annually in arrears for three years (Tk120,000*2.5313)	303,755
Total liability component	1,848,122
Equity component (balancing figure)	151,878
Proceeds of the bond issue	2,000,000

The split between the liability and equity components remains the same throughout the term of the instrument, even if there are changes in the likelihood of the option being exercised. This is because it is not always possible to predict how a holder will behave. The issuer continues to have an obligation to make future payments until conversion, maturity of the instrument or some other relevant transaction takes place.

Solution of Q. No. 5:

(i) Impact of actuarial valuation

The plan assets are less than expected by Tk. 1.54 million, this being a re-measurement loss.
Under IAS 19 *Employee Benefits* (revised 2011), such losses must be recognized in other comprehensive income in the period in which they occur. This would result in the net actuarial difference (the L1.54 million loss on the assets combined with any actuarial gain or loss on the obligation) being presented as other comprehensive income and debited directly to reserves. There would therefore be no direct impact on profit or loss.

(ii) Two benefits of move to defined contribution scheme:

a. Defined contribution schemes are easier for the company to administer and manage. A
fixed level of contributions is paid in monthly installments for each employee. The risk resulting from the variable returns achieved by funds invested is then borne by the employee. This risk is borne by the employer with a defined benefit scheme.

b. Defined contribution schemes are easier to account for. Contributions are charged to profit or loss on a systematic basis. Provided the company is not in arrears on contributions, the monthly double entry required is therefore:

		Tk.	Tk.
DEBIT	Staff costs	X	
CREDIT	Cash		X

Solution of Q. No. 6:

The purchase will be recorded in the books of Concord Ready Mix Concrete using the rate of exchange ruling on 30 September.

DEBIT	Purchases	£25,000	
CREDIT	Trade payables		£25,000

Being the sterling cost of goods purchased for €40,000 (€40,000 ÷€1.60/£1)
On 30 November, White Cliffs must pay €20,000 to settle half the payable (£12,500). This will cost €20,000 ÷ €1.80/£1 = £11,111 and the company has therefore made an exchange gain of £12,500 — L11,111 = £1,389.

DEBIT	Trade payables	£12,500	
CREDIT	Exchange gains: profit or loss		£1,389
CREDIT	Cash		£11,111

On 31 December, the reporting date, the outstanding liability of £12,500 will be recalculated using the rate applicable at that date: €20,000 ÷€1.90/£1 = £10,526. A further exchange gain of £1,974 (£12,500 —£10,526) has been made and will be recorded as follows.

DEBIT	Trade payables	£1,974	
CREDIT	Exchange gains: profit or loss		£1,974

The total exchange gain of £3,363 will be included in the operating profit for the year ending 31December.

On 31 January, White Cliffs must pay the second installment of €20,000 to settle the remaining liability of £10,526. This will cost the company £10,811 (€20,000 ÷€1.85/£1).

DEBIT	Trade payables	£10,526	
DEBIT	Exchange losses: Profit or loss	£285	
CREDIT	Cash		£10,811

Solution of Q. No. 7:

Basic Earning Per Share(20X1) = 450000/4000000
= 0.113 taka

Right Issue = 4,000,000 x .25
= 1,000,000

Detail	No. of Ord. Share	Price per Share	
Existing share	4	X 4.00	16.00
Right issue	1	X 2.00	2.00
Total	5		18.00
Theoretical Ex-rights price(TERP)	= 18/5	= Tk3.60	

Time Period	Detail	No. of Ord Share	Adjustment	
1/1 to 31/3	Existing share	4,000,000	X 3/12 x 4.00/3.60	1,111,111
¼	Right issue	1,000,000		
1/4 to 31/12	Balance	5,000,000	X 9/12	3,750,000
Weighted average no. Ord. Share				4,861,111
BEPS (20X2) =				580000/4861111 x 100
				=Take 0.119
Restated EPS For 20X1				=0.113*3.6/4.0
				=Tk0.102

Solution of Q. No. 8:

(i) Consolidated statement of financial position as at 31 March 20X4

	Tk.	Tk.
Assets		
Non-current assets Property, plant and equipment (660,700 + 635,300 + 24,000 - 1,000 (W1)- 3,000 (W7)) Intangibles (101,300 + 144,475 (W2))		 1,316,000 245,775

Investment in joint venture (W6)		93,600
		1,655,375
Current assets Inventories (235,400 + 195,900 - 2,400 (W5)) Trade and other receivables (174,900 + 78,800 - 50,000) Cash and cash equivalents (23,700 + 11,900 + 10,000)	 428,900 203,700 45,600	
		678,200
Total assets		2,333,575
Equity and liabilities		
Equity attributable to owners of Preston plc. Ordinary share capital Revaluation surplus Retained earnings (W4)		 100,000 125,000 1,099,550
		1,324,550
Non-controlling interest (W3)		190,025
Total equity		1,514,575
Current liabilities Trade and other payables (151,200 + 101,800- 40,000) Taxation (85,000 + 80,000) Deferred consideration	 213,000 165,000 441,000	
		819,000
Total equity and liabilities		2,333,575

WORKINGS

(1) Net assets - Longridge Ltd

	Year end Tk.	*Acquisition Tk.*	*Post acq Tk.*
Share capital	500,000	500,000	
Retained earnings Per Q Less intangible (72,000 + 18,000) Fair value adj re PPE (120,000- (92,000 x 48/46)) Dep thereon (24,000 x 2/48) PPE PURP (W7)	 312,100 (72,000) 24,000 (1,000) (3,000)	 206,700 (90,000) 24,000 - -	
	760,100	640,700	119,400

(2) Goodwill - Longridge Ltd

	Tk.
Consideration transferred (250,000 + (441,000 -41,000 (W4)))	650,000
Non-controlling interest at acquisition (640,700 (W1) x 25%)	160,175
	810,175
Net assets at acquisition (W1)	(640,700)
	169,475
Impairment to date	(25,000)
	144,475

(3) Non-controlling interest - Longridge Ltd

	Tk.
Non-controlling interest at acquisition (W2)	160,175
Share of post-acquisition reserves (119,400 (W1) x 25%)	29,850
	190,025

(4) Retained earnings

	Tk.

Preston plc	1,084,800
Unwinding of discount on deferred consideration: Two years (441,000— (441,000 / 1.05^2)) Less PURP (Longridge Ltd) (W5) Longridge Ltd (119,400 (W1) x 75%) Chipping Ltd (W6) Less impairments to date (25,000 + 10,000)	 (41,000) (2,400) 89,550 3,600 (35,000)
	1,099,550

(5) Inventory PURPs

	%	*Real Estate Tk.*	*Ready Mix Concrete Tk.*
SP	100	15,000	12,000
Cost	(80)	(12,000)	(9,600)
GP	20	3,000	2,400

(6) Investment in joint venture — Ready Mix Concrete

	Tk.	*Tk.*
Cost		100,000
Add post-acquisition profits Less PURP (W5)	12,000 (3,000)	
	9,000	
x 40%		3,600
		103,600
Less impairment to date		(10,000)
		93,600

(7) PE PURP — Real Estate

	Tk.
Asset now in Concord Group's books at 15,000 x 1/3	5,000
Asset would have been in Real Estate's books at 10,000 x 1/5	(2,000)
	3,000

(iii) Goodwill journal entries

		Tk.	*Tk.*
DEBIT	Intangibles—goodwill	39,160	
DEBIT	Share capital	320,000	
DEBIT	Retained earnings	112,300	
CREDIT	Investments		385,000
CREDIT	Non-controlling interest (320,000 + 112,300) x 20%		86,460

Solution of Q. No. 9:

(a) To: Finance Director
From: Management accountant
Subject: *Performance ofLaurieCo20X6to20X8*

An appendix is attached to this report which shows the ratios calculated as part of the performance review.

Profitability
The gross profit margin has remained relatively static over the three year period, although it has risen by approximately 1% in 20X8. ROCE, while improving very slightly in 20X7 to 21.5% has dropped dramatically in 20X8 to 17.8%. The net profit margin has also fallen in 20X8, in spite of the improvement in the gross profit margin. This marks a rise in expenses which suggests that they are not being well controlled. The utilisation of assets compared to the turnover generated has also declined reflecting the drop in trading activity between 20X7 and 20X8.

Trading levels
It is apparent that there was a dramatic increase in trading activity between 20X7 and 20X8, but then a significant fall in 20X8. Revenue rose by 17% in 20X7 but fell by 7% in 20X8. The reasons for this fluctuation are unclear. It may be the effect of some kind of one-off event, or it may be the effect of a change in product mix. Whatever the reason, it appears that improved credit terms granted to customers (receivables payment period up from 46 to 64 days) has not stopped the drop in sales.

Working capital

Both the current ratio and quick ratio demonstrate an adequate working capital situation, although the quick ratio has shown a slight decline. There has been an increased investment over the period in inventories and receivables which has been only partly financed by longer payment periods to trade payables and a rise in other payables (mainly between 20X6 and 20X7).

Capital structure
The level of gearing of the company increased when a further Tk64m was raised in long-term loans in 20X7 to add to the Tk74m already in the statement of financial position. Although this does not seem to be a particularly high level of gearing, the debt/equity ratio did rise from 18.5% to 32.0% in 20X7. The interest charge has risen to Tk19m from Tk6m in 20X6. The 20X7 charge was Tk15m, suggesting that either the interest rate on the loan is flexible, or that the full interest charge was not incurred in 20X7. The new long-term loan appears to have funded the expansion in both fixed and current assets in 20X7.

APPENDIX

Ratio	*20X6*	*20X7*	*20X8*
Gross profit margin	34.0%	34.3%	35.4%
ROCE	21.1%	21.5%	17.8%
Profit margin	11.9%	12.4%	11.4%
Assets turnover	1.78	1.73	1.56
Gearing ratio	15.6%	24.3%	23.6%
Debt/equity ratio	18.5%	32.0%	30.9%
Interest cover	16.7	8.1	5.5
Current ratio	3.0	2.8	2.7
Quick ratio	1.2	1.1	1.1
Receivables payment period (days)	46	52	64
Inventory turnover period (days)	156	171	182
Payables turnover period	35	42	46

(b) Areas for further investigation include the following:

(i) *Long-term loan*

There is no indication as to why this loan was raised and how it was used to finance the business. Further details are needed of interest rate(s), security given and repayment dates.

(ii) *Trading activity*

The level of sales has fluctuated in quite a strange way and this requires further investigation and explanation. Factors to consider would include pricing policies, product mix, market share and any unique occurrence which would affect sales.

(iii) *Further breakdown*

It would be useful to break down some of the information in the financial statements, perhaps into a management accounting format. Examples would include the following.

(1) Sales by segment, market or geographical area
(2) Cost of sales split, into raw materials, labour and overheads
(3) Inventory broken down into raw materials, work in progress and finished goods
(4) Expenses analysed between administrative expenses, sales and distribution costs

(iv) *Accounting policies*

Accounting policies may have a significant effect on certain items. In particular, it would be useful to know what the accounting policies are in relation to intangible assets (and what these assets consist of), and whether there has been any change in accounting policies.

(v) *Dividend policy*

The company has maintained the level of dividend paid to shareholders (although it has not been raised during the three year period). Presumably the company would have been able to reduce the amount of long-term debt taken on if it had retained part or all of the dividend during this period. It would be interesting to examine the share price movement during the period and calculate the dividend cover.

Tutorial note :- Other matters raised could have included:

(1) Working capital problems, particularly inventory turnover and control over receivables

(2) EPS (which cannot be calculated here as the number of shares is not given) and other related investor statistics, such as the P/E ratio.