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THE INSTITUTE OF CHARTERED ACCOUNTANTS OF SRI LANKA

Corporate Level

Corporate Finance & Risk Management

(Pilot Paper)

Instructions to candidates

(1) Time allowed: 3 hours.

(2) Section 1: 2 questions – **both questions are compulsory.**

Section 2: 1 question – **compulsory.**

(3) Answers to questions should be in the answer booklet provided to you. Begin each answer on a separate page.

(4) All answers should be in **English.**

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June 2015

SECTION 1

Question 01

A. ABC plc is a telecommunication company listed on the Colombo Stock Exchange with excellent performance recorded for the last two years. The board of directors has decided to expand the business by acquiring a well performing electronics company, PQR plc, which is also a listed company on the Colombo Stock Exchange. The business research team of ABC plc had presented a report to the board of directors with the finding that PQR shares are currently significantly undervalued by the market. It has been a while since ABC plc has instructed its stock brokers to purchase shares of PQR and the report further indicated that the total stake in PQR plc owned by ABC plc has now reached 10%.

A decision has been made that ABC initiates a hostile takeover of PQR and a mandatory offer is made for the remaining shares of PQR plc.

Required:

1. **Advise** the board of directors of ABC plc on what is meant by a "Mandatory Offer" as per the provisions of the Takeovers and Mergers Code, and the procedure to be followed, assuming that the proposed takeover will increase ABC plc's stake in PQR plc to over 51%. Note any other implications arising from the fact that this would be considered a hostile takeover.

(10 marks)

2. **Discuss** briefly the possible circumstances that could have occurred for PQR shares to be undervalued, making it a target for a hostile takeover.

(5 marks)

B. The Board of Directors of ABC plc has also decided to expand the operations into a few selected offshore locations to gain unique tax and other concessions. The Company entered into an agreement with a foreign government to construct a factory in one of the Asia Pacific (AP) countries. The foreign government is attracting direct investments (FDI) in such a way that it would pay back the investment made by the investor plus a margin as benefit of the investment. As per the contract, the factory will be acquired by the local government at the end of the first year and the total contract price (TCP) will be paid back to the investor with a profit margin of 25%. The total contract price (TCP) has been fixed at 2,000 million Asia Pacific Country Currency (APC), and the payback will be in APC.

In order to fulfill the contract, ABC will need to invest 1, 000 million APC in the project immediately, and a fixed additional sum of 500 million APC in six months. The government of the AP country has offered ABC a fixed-rate currency swap for one year for the full 1,500 million APC at a swap rate of 20 APC/LKR (20 APC = 1 LKR). ABC would have to pay the government net interest of 10% per year, payable in APC.

There is no forward foreign exchange market for the APC against the LKR. Forecast inflation rates for the next year are:

Probability	LKR	Asia Pacific (AP)
0.3	4%	10%
0.6	5%	20%
0.1	7%	30%

The APC is a freely floating currency which has not recently been subject to major government intervention.

The current spot rate is 25 APC/LKR. ABC's opportunity cost of funds is 12% per year in Sri Lanka. The Company has no access to funds in the AP country.

Taxation, the risk of default, and discounting to allow for the timing of payments may be ignored.

Required:

Evaluate whether it is likely to be beneficial for ABC plc to agree to the currency swap.

(10 marks)

Total 25 marks

Question 02

PTO is a private limited company which manufactures specialized automobile parts for various vehicle makers. The last financial year has been a successful year for them and the board of directors has made a strategic decision to reinvest some of the retained earnings into other profitable businesses operating within the same business segment. The business research team has been looking at two mutually exclusive projects, each of which is expected to have a life of five years. The Company does not have the capacity to undertake both investments. Forecast financials of the two investments are as follows.

Investment 1

Year / Rs. Mn	0	1	2	3	4	5
Initial cost	(1,000)					
Projected sales		800	900	1,000	1,400	1,600
Production costs		520	600	700	900	1,000
Finance charges		42	42	42	42	42
Depreciation		250	188	140	106	80
Profit before tax		(12)	70	118	352	478

Average profit before tax = Rs. 201.2 Mn

Investment 2

Year / Rs. Mn	0	1	2	3	4	5
Initial cost	(350)					
Projected sales		1,050	1,400	1,600	1,658	1,976
Production costs		920	1,040	1,100	1,180	1,260
Depreciation		88	66	50	36	28
Profit before tax		42	294	450	442	688

Average profit before tax = Rs. 383.2 Mn

Additional information

01. The products will be sold to Indian automobile makers through their agents in Sri Lanka and the income will be generated in Indian Rupees for both projects. The selling prices will be increased by 9% in foreign currency each year and it is assumed that production costs will also increase by the same percentage. The increase will start after Year 1.

02. However, the above estimates have ignored any future exchange rate fluctuations and any inflationary impact. All the revenue figures have been calculated based on the current spot rate as given below.

1 INR = 2.11 LKR

03. The forecast inflation rates for both countries are given below.

	Sri Lanka	India
Year 1	10%	12%
Year 2	9%	12%
Year 3	9%	11%
Year 4	8%	10%
Year 5	8%	9%

You may assume that the exchange rate is a function of purchasing power parity between the two countries for the period under review.

04. Capital allowances can be claimed at 25% per year on a reducing balance basis for tax calculations.

05. Both investments are of similar risk to the Company's existing operations.

06. Tax and depreciation allowances are granted one year in arrears. Tax is at 25% per year.

07. The Company's real cost of capital is 7% per year and the inflation rate is assumed to be 8% per year on average for the foreseeable future for the purpose of calculating the nominal cost of capital.

08. All cash flows may be assumed to occur at the end of the year unless otherwise stated.

09. The Company currently receives interest at 10% per year on short-term money market deposits of Rs. 700 Mn.

10. Both investments are expected to have negligible scrap value at the end of five years.

1. Director A favours Investment 2, as it has a larger average profit.
2. Director B favours Investment 1, which she believes has a quicker discounted payback period, based upon cash flows.
3. Director C argues that the Company can make Rs. 70 Mn per year on its money market investments and that when risk is taken into account, there is little point in investing in either project.

Required:

1. **Evaluate** the validity of the arguments presented by each Director as a method of project evaluation with respect to the decision to select Investment 1, Investment 2 or neither.

(6 marks)

2. **Validate** Director B's statement that Investment 1 has the quicker discounted payback period.

(4 marks)

3. **Recommend** which option, if any, should be selected in order to maximize shareholders' wealth. All calculations must be shown. (You may round up figures for easy analysis.) **(10 marks)**

4. **Outline** other non-financial factors which would influence the choice of investment.

(5 marks)

Total 25 marks

SECTION 2

Question 03

The board of directors of Migaya plc has just returned from strategy formulation sessions with many areas to clarify before the next meeting. Given below are some important extracts from the meeting minutes which have been sent to your organization seeking your assistance as the business consultants of the Migaya Group.

Extract #1 –

The chairman commenced the strategy session making a special note that several orders from construction companies received during the peak seasons were not accepted as all plants were running at their fullest capacity. Hence, the management decided to look for capacity expansion methods in the short run in order to meet increasing demand and retain the market share of the Company. The majority of directors decided that a possible acquisition would accomplish this objective faster as organic growth would require a substantial time period.

Extract #2 – The business research team tabled a report on possible acquisition targets and Clayhaus Tiles plc was at the top of the list. Clayhaus Tiles plc is a listed company on the Colombo Stock Exchange and a leading player in the floor tile segment with manufacturing capabilities in other segments such as wall tiles. The summarized financial statements and non-financial information relating to Clayhaus Tiles were tabled for further analysis and discussions.

Clayhaus Tiles **Income statement**		
For the year ended 31st March	**2015**	**2014**
	Rs. 000	Rs. 000
Revenue	1,447,812	1,423,705
Cost of sales	(1,111,299)	(1,052,600)
Gross profit	336,513	371,105
Other income	30,775	9,404
Administrative expenses	(83,624)	(82,913)
Distribution expenses	(88,212)	(70,248)
Other expenses	(346)	(5,722)
Net finance costs	(68,387)	(43,054)
Profit before tax	126,719	178,572
Income tax expenses	(26,907)	(54,999)
Profit after tax	99,812	123,573
Earnings per share (Rs.)	5.55	6.34

Dividend per share (Rs.)	0.55	0.75
Market value of shares as at year end (Rs.)	13.59	14.88

Clayhaus Tiles **Statement of financial position**		
As at 31st March	**2015**	**2014**
	Rs. 000	Rs. 000
ASSETS		
NON-CURRENT ASSETS		
Property, plant & equipment	3,272,943	3,111,383
CURRENT ASSETS		
Inventories	1,350,855	717,358
Trade and other receivables	787,092	721,874
Other investments	-	-
Cash and cash equivalents	127,546	50,919
	2,265,493	1,490,151
TOTAL ASSETS	5,538,436	4,601,535
EQUITY AND LIABILITIES		
Stated capital	156,000	156,000
Reserves	525,301	428,943
Retained earnings	696,645	668,738
	1,377,946	1,253,681
NON-CURRENT LIABILITIES		
Loans and borrowings	1,257,526	964,357
Employee benefits	530,645	464,696
	1,788,171	1,429,053
CURRENT LIABILITIES		
Trade and other payables	972,588	1,206,349
Loans and borrowings	930,647	449,392
Bank overdraft (secured)	469,083	263,059
	2,372,319	1,918,800
TOTAL EQUITY AND LIABILITIES	5,538,436	4,601,535

Extract #3 - The deputy chairman started the discussion re-emphasizing that he is unhappy about Migaya Group's lower Return on Equity in 2015 compared to last year. The target company was also not healthy from a ROE perspective which raised serious concerns. He continued to explain that lower ROE could be due to three main reasons, namely lack of operational excellence, ineffective asset utilization, and higher financial leverage, and instructed the team come up with adequate analysis before concluding the acquisition. The long term solvency was also a key concern for him and he requested the chief financial officer to calculate key indicating ratios for both entities and prepare a report.

Extract #4 – The drop in share price of Migaya Group was a concern for most of the board members including the chairman who emphasized the importance of share price stability in light of the proposed expansions . According to him the dilution in share price is a result of a drop in dividends declared by the Company and he wants to ensure that dividends are maintained at an agreed level with clear communication to shareholders so as to avoid any further dilution in share prices. However, there is an obvious question arising as to how to pay dividends with a massive investment of this nature under consideration. The chairman continued to argue that the cost of capital has increased over time with shareholders requiring higher returns to compensate higher financial leverage.

Extract #5 – The director – risk and governance, was of the view that the proposed acquisition will not help the group from a diversification perspective and in fact it will in the long run increase the risk of volatility of return as measured by variance and standard deviation. He tabled the correlation coefficient calculation, which was +1.02, to justify his viewpoint and wanted to look for a new company with a negative correlation coefficient to stabilize return on equity.

Extract #6 – The business research team headed by the finance director had carried out a cost-benefit analysis to evaluate if the acquisition could bring adequate synergies to the group and presented the findings to the board of directors as below.

Migaya plc will reduce the scale of operations of Clayhaus Tiles plc by selling off its bathware division which accounts for Rs. 6 Mn of Clayhaus Tiles's latest earnings as indicated above. The estimated selling price for the division is Rs. 42.1 Mn.

It has been revealed that promotional expenses can be carried out in an effective manner once the re-organization is completed and a Voluntary Retirement Scheme (VRS) will be open for selected job categories in Clayhaus Tiles plc. Earnings in Clayhaus Tiles' remaining operations could be increased by an estimated 20% on a permanent basis due to these measure but the Company will have to incur a VRS cost of Rs. 10 Mn to lay off excess staff.

Migaya plc does not anticipate any alteration to Clayhaus Tiles plc's price/earnings multiple as a result of these improvements in earnings. With the two entities coming together most of the distribution costs can be shared and some of Migaya's property could be disposed of at an estimated price of Rs. 75.2 Mn. Rationalization costs are estimated at Rs. 21 Mn.

Extract #7 – The financing of the proposed acquisition was a major concern. The majority of directors was of the view that the target company was too big for them to raise finance as the Migaya Group is highly levered. The marketing director raised the question of whether Migaya plc could issue new shares and swap them for Clayhaus Tiles plc shares.

Extract #8 - A newly appointed director argued that the capital structure has no impact on the value of the firm which is independent of the percentage of debt. He quoted the Modigliani –Miller Proposition 1 (MM) as below to support his viewpoint.

MM Proposition 1 – The value of a levered firm is the same as the value of an unlevered firm.

	CLAYHAUS TILES PLC	MIGAYA PLC
Beta values	1	0.79
Average dividend payout ratio – (you may use this rate for business growth (g) calculations for next year).	20%	30%

Assume that the risk-free rate is 8% with the market risk premium around 6.5%.

Migaya plc will be issuing new shares to settle the purchase consideration as suggested by the marketing director (Extract #7). Migaya plc will issue 30 Mn of its shares to settle the purchase consideration at the rate of one share of Migaya plc for one share of Clayhaus Tiles plc.

You may assume that all other things being equal, Migaya's estimates are in line with those of the market.

Description	Number of shares	Latest price per share
Clayhaus Tiles plc	90 Mn	Rs.13.59

Required:

1. a) **Analyse** the ROE using the DuPont methodology in computing ROE for both Migaya Group and Clayhaus Tiles. **(5 marks)**

   b) **Assess** the weak areas of the three main components of ROE identified in part (a) above and comment on the concerns raised by the deputy chairman on long term solvency (Extract # 3). **(5 marks)**

2. **Evaluate** critically the rationale for the decision to declare dividends as opposed to retaining the earnings in the Company to reinvest and increase shareholders' wealth, in light of the chairman's concerns as mentioned in Extract #4. Propose practical examples in support of your views.

   (6 marks)

3. **Calculate** the cost of capital for both Migaya and Clayhaus Tiles based on the CAPM and dividend growth valuation methods. **(6 marks)**

4. a) The Managing Director has requested a third party independent opinion on the concerns raised by the director – risks and governance (Extract # 5). You are required to **evaluate** the view point made by him with reference to Clayhaus Tiles plc. **(6 marks)**

   b) **Explain** briefly three key motives for an organization to go ahead with an acquisition or a merger as proposed by the business research team.

   (3 marks)

5. **Criticize** the validity of the merger decision by calculating a theoretical market price of the merged Migaya plc shares assuming the plans set by the business research team (Extract # 6) can be materialized. **(8 marks)**

6. According to the newly appointed director (Extract # 8), the capital structure has no relevance to the value of a business and he has quoted Modigliani –Miller Proposition 1 (MM). You are required to **discuss** the practicality of the assumptions made in arriving at such proposition in the real world.

   (5 marks)

7. **Explain** alternative ways of raising funds through the equity market as well as the debt market. **(6 marks)**

Total 50 marks