



CERTIFIED PUBLIC ACCOUNTANT ADVANCED LEVEL 2 EXAMINATIONS A2.1: STRATEGIC CORPORATE FINANCE THURSDAY: 11 JUNE 2015

INSTRUCTIONS:

- 1. **Time Allowed: 3 hours 45 minutes** (15 minutes reading and 3 hours 30 minutes writing).
- 2. This examination has two sections; A & B.
- 3. Section A has one Compulsory Question while Section B has three Optional Questions to choose any two.
- 4. In summary attempt three questions.
- 5. Marks allocated to each question are shown at the end of the question.
- 6. Show all your workings

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SECTION (A)

Compulsory question

QUESTION ONE

The following information relates to Ibati Co, a non listed company which manufactures metal sheets. The owners of Ibati Co. have been looking for a suitable buyer for their company for some time, but all in vain. During the previous general meeting, they resolved to incur extra debt and continue the business while waiting for a buyer who will be ready to pay for the firm value plus an 18% premium.

Ibati Co. Income Statement extracts

Year Ended 31 October	2014	2013	2012	2011
ICPAR ICPAR ICPAR ICPAR ICPAR ICPAR ICPAR I	CPAR ICPAR ICPAR I "000" A ICE	PAR ICPAR ICPAI"000" PA	R ICPAR ICP"000"	CPAR ICP 000'
Sales revenue	484,380.00	456,870.00	434,730.00	406,690.00
Operating profit	165,408.00	162,368.00	135,776.00	142,556.00
Net interest costs PARICPARICPARICPARIC	PAR ICPAR ICPA 11114,670.00	AR ICPA 14,190.00	13,860.00	13,740.00
Profit before tax	150,738.00	148,178.00	121,916.00	128,816.00
Taxation (30%)	45,221.40	44,453.40	36,574.80	38,644.80
After tax profit	105,516.60	103,724.60	85,341.20	90,171.20
Dividends	4,305.00	4.025.00	3,780.00	3,515.00
Retained earnings	PAR (CPAR (CPA 101,211.60 101	99,699.60	81,561.20	86,656.20

Ibati Co. has a market debt to equity ratio of 10:90 and an estimated equity beta of 1.65. It is anticipated that Ibati Co. will pay interest at 7% on its future borrowings.

According to the current investments plan, Ibati Co. will require additional investment in assets of Frw 340 per Frw 1,000 increase in sales revenue, for the next four years. Currently, the depreciation allowable for tax purposes is equivalent to the amount of investment needed to maintain current operational levels.

For the next four years, Ibati Co.'s sales revenue will grow at the same average rate as the previous years. After the forecasted four-year period, the growth rate of its free cash flows will be half the initial forecast sales revenue growth rate for the foreseeable future.

i) Use the free cash flow method to estimate the value of Ibati Co. as well as the premium that the owners are expecting on its sale (17 Marks)

Shortly after the extra-debt decision, Ibati Co. entered into negotiations with All Metal Co. All Metal Co. is a company seeking to expand its investments by bidding for well performing companies in the industry and simultaneously eliminate potential competitors.

To acquire Ibati Co., All Metal Co. would use a combination of debt finance and cash reserves such that the capital structure of the combined company remains at All Metal Co.'s current capital structure level that is market debt to equity ratio of 40:60. All Metal Co. would also pay off any outstanding debt that Ibati Co. owed. Currently All Metal Co. has a total firm value (market value of debt and equity combined) of Frw 4,200 million.

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Information about All Metal & Ibati combined company:

- Following the acquisition, it is expected that sales revenue will be Frw 1,558,560 in the first year. For the following four years the growth rate in sales revenue will be 6.2% per year.
- The profit margin on sales will be 25% for the foreseeable future.
- The company will pay an after tax annual interest rate of 6.2% on future borrowings. The equity beta is estimated to be 1.335.
- The company will require additional investment in assets of Frw 20,018,000 in the first year and then Frw 220 per Frw 1,000 increase in sales revenue for the next four years.
- It is anticipated that after the forecasted five-year period, the company's free cash flow growth rate will be 4.5%.

In addition, All Metal Co. is interested in merging with Sheets Co., a quoted aluminum sheets manufacturing company.

The following are the premerger information:

R IGPAR ICPAR ICPAR ICPAR ICPAR ICPAR ICPAR IC R ICPAR ICPAR ICPAR ICPAR ICPAR ICPAR ICPAR IC	All Metal Co.	Sheets Co.
Shares outstanding	2,520,000	1,000,000
Price per share AR ICPAR ICPAR ICPAR ICPAR ICPAR	PAR CPAR IC Frw1,000 R ICPAI	CPAR (Frw1,500 AR ICPA
Outstanding debts @ 6.6%	1,680,000,000	ICPAR ICPAR ICPAR ICPAR ICPA ICPAR ICPAR ICPAR ICPAR ICPA
Dividend payment	PAR CPAR ICP Frw500 AR ICPA	Frw180

For past years, Sheets Co.'s increase in dividend payments has been 2%. This is unlikely to continue for the foreseeable future. Current Sheets Co.'s cost of equity stands at 12% and the Company is willing to be bought for Frw 1,800 per share in cash. After paying for Sheets Co.'s market value, the synergistic benefits accruing to All Metal Co. has been estimated to Frw 650,000,000.

Other information:

The current annual government base rate is 4.1% and the market risk premium is estimated at 6% per year. The relevant annual tax rate applicable to all companies is 30%.

REQUIRED:

- i) As All Metal Co.'s Corporate Finance Manager, prepare a report to the Board of Directors that:
- (1) Evaluates whether the acquisition of Ibati Co. would be beneficial to All Metal Co. and its shareholders using the free cash flow method. Include all relevant calculations. (18 Marks)
- (2) Computes the net present value of the proposal to merger with Sheets Co. (2) (4 Marks)
- (3) Concludes whether the investment in Ibati Co. or Sheets Co. should be pursued. PARICEPARIC (2 Marks)
- (4) Discusses the limitations of the estimated valuations in part (1) and (2) above. (9 Marks)

(Total 50 Marks)

SECTION B

Attempt two questions from this section

QUESTION TWO

Smart Cleaners Limited (SCL) was incorporated in 1989 to carry out door-to- door smart cleaning at 'reasonable' prices. Five years after getting listed on Kigali Securities Exchange, SCL's products have hit a market snag and the company is considering diversifying into landscaping and grass trimming.

Data on one of the listed companies in the landscaping and grass trimming industry (Faster Cleaners Limited -FCL) and for SCL are shown below:

ICPAR IUPAR IUPAR IUPAR IUPAR IUPAR IUPAR IUPAR ICPAR ICPAR ICPAR ICPAR ICPAR ICPAR ICPAR ICPAR	FCL	SCL
ICPAR ICPAR ICPAR ICPAR ICPAR ICPAR ICPAR ICPAR ICPAR ICPAR ICPAR ICPAR ICPAR ICPAR ICPAR	Frw "million"	Frw "million"
Non-current assets	24,600	20,600
Working capital	7,200	12,700
ICPAR ICPAR ICPAR ICPAR ICPAR ICPAR ICPAR ICPAR ICPAR ICPAR ICPAR ICPAR ICPAR ICPAR ICPAR ICPAR	31,800	33,300
Bank Loan	12,600	17,400
Ordinary shares (par value Frw(100)	9,000	4,000
Reserves	10,200	<u>11,900</u>
ICPAR ICPAR ICPAR ICPAR ICPAR ICPAR ICPAR ICPAR ICPAR ICPAR ICPAR ICPAR ICPAR ICPAR ICPAR ICPAR	31,800	33,300 <u>33,300</u>
Turnover	42,700	45,000
Earnings per share (Frw)	PAR ICPAR ICPAR 53.3	PAR ICPAR ICPAR 106.0
Dividend per share (Frw)	PAR ICPAR ICPAR ICP 20	PAR ICPAR ICP 40
Price /earnings ratio	icpar icpar icpar i10:10	PAR ICPAR ICPAR ICI8:10
Beta equity icparicparicparicparicparicpar	ic par icpar icpar i 1:250	PAR ICPAR ICPAR I 0.95

Additional information:

- (i) Debt may be assumed to be risk free and is available to SCL at 0.5% above the Treasury Bill rate which is currently at 9% per year, and market return is 16%.
- (ii) Tax is payable at the rate of 35%
- (iii) SCL doesn't expect its financial gearing to change significantly if the company diversifies into the provision of landscaping and trimming services.

REQUIRED:

- (a) SCL has the equity beta of 0.95 and the alpha value is +1.5. Explain the meaning of these values to the management of SCL. (5 Marks)
- (b) Estimate the discount rate SCL should use in the appraisal of its proposed diversification. State all your assumptions (15 Marks)
- (c) Discuss whether systematic risk is the only risk that SCL's shareholders should be concerned with.

(5 Marks)

(Total 25 Marks)

QUESTION THREE

Tuzamuke Ltd is a medium sized Rwandan company with export and import trade with the Kenyan counterparts. The following transactions are due within the next six months. Transactions are in the currency specified.

Purchases of components, cash payment due in three months	Kshs 116,000.
Sale of finished goods, cash receipt due in three months:	Kshs 197,000.
Purchase of finished goods for resale, cash payment due in six months:	Kshs 447,000.
Sale of finished goods, cash receipt due in six months:	Kshs 154,000.

Exchange rates

Kshs/Frw par icpar icpar icp	0.125-0.159 ICPAR ICPAR ICPAR ICPAR ICPAR
Spot cpar icpar icpar icpar icp	0.82–0.77 cents premium
Three months forward	0.82–0.77 cents premium
Six months forward	0.1015-0.1243 cents premium

Three months or six months	Interest rates Borrowing	Lending
Frw PAR CPAR CPAR F	12.5%	9.5%
CPAR CPAR CPAR CPAR CPAR CPAR C	9% A GPAR (CPAR)	6%

REQUIRED:

(a) Calculate the net Frw receipts and payments that Tuzamuke Ltd might expect for both its three and six month transactions if the company hedges foreign exchange risk on

(i) The forward foreign exchange market

(12 Marks)

(ii) The money market

(13 Marks)

(Total 25 Marks)

QUESTION FOUR

Quality Products (QP) Ltd, a leading manufacturer in its field, is planning an expansion programme. It has estimated that it will need to raise an additional Frw.100 million. QP Ltd is discussing with its investment banker the alternatives of raising the Frw.100 million through debt financing or through issuing additional equity shares. The debt to total asset ratio in its industry is 40%. QP Ltd's balance sheet and income statements are as follows:

Balance sheet as at 31 December 2014			
I ICPAR ICPAR ICPAR ICPAR I ICPAR ICPAR ICPAR ICPAR	Million (Frw)	CI AR ICPAR ICPAR ICPAR ICPAR ICPAR ICPAR ICPAR ICPAR I CI AR ICPAR ICPAR ICPAR ICPAR ICPAR ICPAR ICPAR ICPAR I	Million (Frw)
Current Assets	600	Current liabilities	200
Net fixed assets	400	Long term debt (10%)	100
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iCPAR iCPAR iCPAR iCPAR	i (PAR i CPAR i CPAR i CPAR i	Share premium	200
iCPAR iCPAR iCPAR iCPAR	iCPAR iCPAR iCPAR iCPAR i	Retained earnings	400
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Income statement for the year ended 31 December 2014		
CPAR iCPAR iCPAR iCPAR iCPAR iCPAR CPAR	Frw. Millions	
Total revenues	<u>2,000</u>	
Net operating income	RICPARICPARIC 260 ARICPARICPARIC	
Interest expenses	R ICPAR ICPAR ICPA <u>10</u> PAR ICPAR ICPAR IC	
Income taxes (at 40%)	r icpar icpar icp <u>100</u> par icpar icpar ic	
Net income after tax CPAR CPAR	R ICPAR ICPAR ICP <u>150</u> PAR ICPAR ICPAR IC	

The company expects to increase its total revenue by Frw.200 million and net operating income by Frw. 26 million if the expansion is undertaken. The company's effective tax rate is 40% and dividend pay-out has averaged about 60% of net income. At present, its cost of debt is 10% and its cost of equity is 15%. If the additional funds are raised through debt, the cost of debt will be 10% and cost equity will be 15.2%. If the funds are raised by equity, the cost of debt will be 10% and the cost of equity will be 14.8%.

The current share price at which new equity can be sold is Frw.100.

REQUIRED:

a) Calculate the effects of the alternative forms of financing on:

Riù	The total value of equity	of the firm ICPARIC	PAR ICPAR	10 Marks
1	The total value of equity	of the min.		IU IVIAI NO

iii) Total market-value of the firm.

iv)The firm's weighted average cost of capital. (4 Marks)

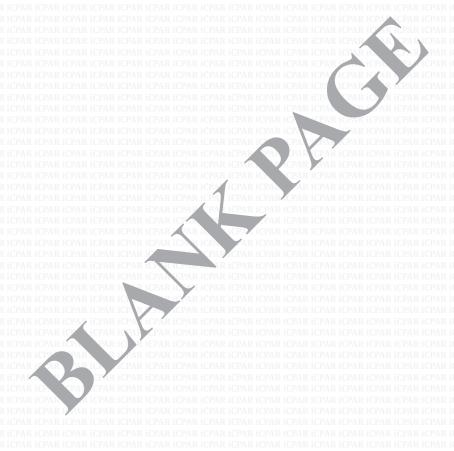
b) Discuss the arguments for and against the introduction of statutory controls on corporate governance.

(3 Marks)

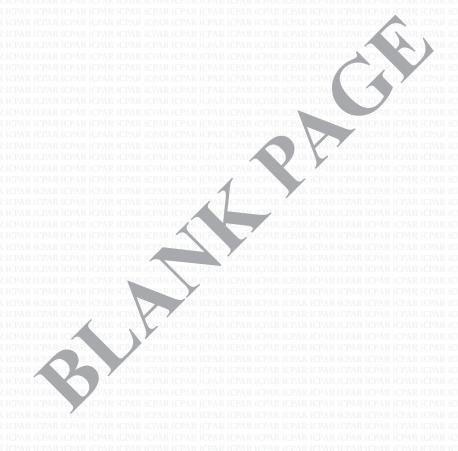
(Total 25 Marks)

End of question paper

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