

CERTIFIED PUBLIC ACCOUNTANT

ADVANCED LEVEL 2 EXAMINATION

A2.1: STRATEGIC CORPORATE FINANCE

THURSDAY: 09 JUNE 2016

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**

SECTION A

Compulsory question

QUESTION ONE

Mfite Oil Industries Limited (MOIL)

MOIL is a petroleum waste management company operating in the East African region and is listed on the Kigali Stock Exchange (KSE). The company has just released their annual financial statements for the year ended 31 March 2016, which are given in the excerpts below.

Statement of comprehensive income

	2016	2015
	Frw ‘million’	Frw ‘million’
Revenue	2,443,251	2,223,359
Cost of sales	<u>(1,910,522)</u>	<u>(1,781,849)</u>
Gross profit	532,729	441,510
Administrative expenses	(219,860)	(186,881)
Other operating expenses	<u>(201,670)</u>	<u>(162,869)</u>
Operating profit	111,199	91,760
Finance costs	<u>(59,250)</u>	<u>(29,250)</u>
Profit before tax	51,949	62,510
Taxation	<u>(14,286)</u>	<u>(17,190)</u>
Profit after tax	<u>37,663</u>	<u>45,320</u>

Statement of financial position

	2016	2015
	Frw ‘million’	Frw ‘million’
Assets		
Non-current:		
Property, plant and equipment	383,960	334,318
Current assets:		
Inventory	319,240	263,907
Receivables	185,800	156,303
Cash & bank balances	<u>44,520</u>	<u>25,352</u>
	<u>549,560</u>	<u>445,562</u>
Total assets	<u>933,520</u>	<u>779,880</u>
Equity and liabilities		
Share capital (6,100,000 shares)	61,000	61,000
Retained earnings	179,247	162,299
Other reserves	<u>23,500</u>	<u>26,500</u>
	<u>263,747</u>	<u>249,799</u>
Non-current liabilities		
Long term loans	395,000	195,000
Current liabilities		
Trade payables	175,400	220,509
Overdraft	99,373	114,572
	<u>274,773</u>	<u>335,081</u>
Total equity and liabilities	<u>933,520</u>	<u>779,880</u>

Performance of MOIL shares

Upon release of the financial statements in the local press, the company's share price dropped by 10% to Frw 65,000 per share, a move that observers say will make heads roll within the MOIL Board of Directors (BOD) and senior management. Note that dividends had grown by an average of 5% over the last 5 prior years.

Some of the reports doing rounds in the media indicate that the reduction in financial performance is not going to be a one-off, due to a series of contracts that MOIL entered into that were above their current capacity and failed to appropriately hedge against business risks. The major concerns are that if the Rwandan Franc continues to fluctuate against international currencies, MOIL will continue to make losses on these contracts which may cripple her ability to pay dividends in the short to medium terms. An analyst has also remarked that "... their pride about a constant dividend payout ratio is going to fly through the window".

Management's reactions to share price performance

Reacting to the news about share performance on the KSE, the Managing Director (MD) issued a three-page press release, extracts of which are reproduced below.

MOIL as a strong company

I have learnt of the misleading news about MOIL and deliberate misinterpretation of our just released financial statements in some sections of the media. I want to assure the shareholders of the great MOIL and the public in general, that our company is as strong as ever. I would also like to offer some explanations as follows:

The falsehoods on inability to manage foreign exchange risks:

MOIL has always had various hedging options for our ever-increasing international deals, and we have applied one successful solution after another in the recent past. Our priority hedges are through money markets followed by forward contracts. As we speak, arrangements to hedge our recent transaction with our Bolivian suppliers (details of which are in ***Exhibit A***) are in advanced stages.

Return on new investments:

MOIL continues to invest in highly profitable investments with all new projects generating an average return on investment (ROI) of 16% with our standard being a minimum internal rate of return (IRR) of 18%. Not many of our competitors and other actors have been able to achieve this standard of profitability on their new projects. One such investment is a franchise from *Hi-Tech Oils* of South Africa, for which we received an approval last week from the Investments Committee of the board. This is set to turnaround the fortunes of MOIL. Refer to ***Exhibit B*** below for details.

Working capital management efficiencies.

Our working capital efficiencies have always guaranteed our financial stability and growth. Besides, our working capital cycle is better than the industry average by a whole 10 days, which has eliminated many potential risks associated with improper working capital management.

Capital gearing levels:

Our capital gearing levels are still appropriate to our size and nature of operations and our level of profitability. I need to educate our stakeholders that all ambitious companies must borrow to gear up their operations. You need to look at statements of financial position of some highly profitable institutions in our country; their

gearing levels are as high as 80% and the average gearing for KSE-listed companies is above 70%.

Returns to our investors

MOIL has always surpassed the average return on equity (ROE) of all KSE listed companies which has been in the region of 17% over the last three years. You need to take note that the average ROE for Rwanda and East African companies has always been in the range of 10% to 12% for the last many years.

As a result of a consistently high ROE, the dividend yield of MOIL has been deliberately kept high to keep our shareholders happy. If the EAC capital markets exhibited strong forms of market efficiency, the true share price would be double what it is today.

The planned maximization of shareholder value

Despite all the falsehoods about MOIL's future prospects, I can assure you that with the deliberate steps we are taking to maximize our shareholder value, we shall be able to more-than double the share price within the next 2 to 3 years without a doubt. This can actually be achieved even if we do nothing else except maintaining our profit retention at 45%.

Conclusion and way forward

These are some of the issues I think that analysts in our media houses were unable to decipher. Otherwise, all well-intentioned members of our society should always see these facts and cross-check with us for clarifications where they have challenges. We have our game right, besides our meticulous implementation of well-founded governance principles.

Exhibit A – Transaction with Eureka Ltd of Bolivia Republic.

MOIL recently ordered waste-oil handling equipment worth Bolivian Dollars (B\$) 8 billion, and the bill is payable in six months' time. The following information is available in the money and foreign exchange markets:

Foreign exchange rates:

B\$/Frw	
Spot	2.6757 - 2.6836
6 months	1.86c - 1.71c Premium

Money market rates:

	Deposit	Borrowing
6 months B\$	7.5%	12.75%
6 months Frw	11.5%	16.25%

Exhibit B – Franchise from Hi-Tech Oils – of South Africa.

This franchise requires a one-off investment of Frw 11 billion. It is projected to generate cash inflows of Frw 1.5 billion per annum in Year 1. However, these net inflows will rise by the inflation rate of 8% per annum in years 1, 2 and 3 before leveling off at the year 3 levels indefinitely. It is understood from insider sources that the appropriate cost of capital for such an investment is 15%.

The Board of Directors (BOD) Chairperson's reaction

Dr Deborah Baganda (a medical doctor) is a 9% shareholder in MOIL and is currently the Chairperson of the BOD in the second year of her term. Whereas she has carefully read the MD's statement reproduced in the local press, she still considers it too technical for her understanding. She has indeed highlighted all the

numbers and technical terms in the statement and needs assistance in understanding them and what it is that the company needs to do to get out of the current situation.

Required:

The BOD Chairperson has asked you as an independent adviser to generate for her a report that:

- Provides MOIL's financial performance ratios from the financial statements as commented about by the MD; also advising her on the relevance of the comparisons given; **(12 Marks)**
 - Discusses any five measures the company may implement in order to maximize shareholder value in the context used by the MD; **(8 Marks)**
 - Evaluates the acceptability of the proposed franchise investment in view of MOIL investment criteria, including its sensitivity to initial investment (any calculations should be in Frw millions); **(16 Marks)**
 - Explains the relevance of working capital management to the success of MOIL. **(6 Marks)**
 - Illustrates the potential risk of the hedging mechanisms for the *Eureka* transaction. **(8 Marks)**
- (Total: 50 Marks)**

SECTION B

Attempt two questions from this section

QUESTION TWO

Big Brother Ltd (BBL) is planning to raise funds for the expansion of existing business activities. In preparation for this, the company has decided to determine its weighted average cost of capital (WACC). BBL has the following capital structure:

Ordinary share capital:	Frw 'million'
Authorized: 50,000,000 shares of Frw 200@	10,000
Issued: 40,000,000 shares of Frw 200@	8,000
Share premium	2,000
Reserves	6,000
Shareholders' funds	16,000

BBL has just paid an annual dividend of Frw 22 per ordinary share. The recent growth of ordinary share dividends has been 8% per annum, and this rate of growth is expected to continue. Annual interest has been recently paid on debentures. The ordinary share price is Frw 1,080 and the price of the debentures (par value of Frw 1,000) is Frw 750.

BBL is also planning to invest in a new company; Reliable Investment Ltd's (RIL) security and it anticipates that the security will reach Frw 300 by the end of the year. RIL's beta is 1.3. Assume the return on the market is expected to be 16% and the risk free rate is 4%.

Required:

- Estimate the weighted average cost of capital (WACC) for BBL using:
 - Market values
 - Book values**(15 Marks)**
- Comment on any differences between the two values in (a) above. **(3 Marks)**

- (c) Using CAPM determine the return on RIL's share in one year and also evaluate whether the share is undervalued, overvalued or properly valued with a current value of Frw 250. (7 Marks)

(Total 25 Marks)

QUESTION THREE

Fashion Designers Ltd (FDL) is a fast growing clothing company which has enjoyed significant growth in recent years using an internal growth strategy. The company is now seeking to acquire other companies to speed up its growth drive. It has identified Executive Garments Ltd (EGL) as a suitable candidate for takeover. Both companies have the same level of risk.

EGL produces high quality handmade clothes, with which it has earned several awards. The company has recorded considerable profits in the past, but its output has dwindled over the past two years due to increasing labour costs. Labour unions have pressured policy makers into amending labour regulations, particularly those relating to pension and minimum wage, to provide more benefits and protection for workers. The directors of FDL believe that production and profitability of EGL will be enhanced if the production process is mechanized.

Below are extracts financial data for the two companies immediately before acquisition:

	FDL	EGL
	Frw '000'	Frw '000'
Sales revenue	2,858	1,266
Net operating income	858	506
Interest charges	(142)	<u>(74)</u>
Net income before taxation	716	432
Corporation tax	(158)	(95)
Net income after tax	558	337
Dividends	(223)	<u>(68)</u>
Additional retained earnings	335	<u>269</u>

FDL has 40 million shares and a P/E ratio of 18 while EGL has 25 million shares and a P/E ratio of 12. The directors of FDL have decided that the company takes up all the equity shares in EGL by offering to its shareholders one new share for every one share they hold. They have also decided that FDL mechanises EGL's production process immediately at a cost of Frw 180 million to replace work currently done by hand. It is estimated that operational efficiency that would arise from the acquisition and integration of the two companies would rake in after tax benefits of Frw 250 million every year to perpetuity. The cost of capital of FDL is 25%.

Required:

- (a) Evaluate the acquisition proposal using the net present value method and recommend whether the acquisition should go ahead. (16 Marks)
- (b) Analyze the effect of the acquisition on the earnings per share of FDL following the successful acquisition of EGL. (3 Marks)
- (c) Advise the directors of FDL on three likely sources of conflict in relation to the acquisition of EGL and the mechanisation of its production process, and suggest ways through which the conflict could be avoided or resolved. (6 Marks)

(Total 25 Marks)

QUESTION FOUR.

Astute financial managers appreciate that different shareholders have different needs. The data below relates to three companies' dividend payouts over the last six years. None of the companies has issued or cancelled any shares over the period.

Years	2010	2011	2012	2013	2014	2015
Afrique Ltd:						
Issued shares 24 Million						
Profits after Tax (million)	1,200	1,260	1,160	1,200	1,280	1,320
Dividends declared(million)	480	504	464	480	512	528
Butare Ltd:						
Issued shares 40 Million						
Profits after Tax (million)	2,400	2,600	3,160	3,600	2,480	2,920
Dividends declared (million)	240	264	290	320	352	388
Camuka Ltd:						
Issued shares 70 Million						
Profits after Tax (million)	4,400	2,800	4,200	3,900	4,400	5,120
Dividends declared (million)	400	0	200	0	400	1,120

Required:

(a) Establish the dividend policy which each of the companies appears to be following. Show all appropriate computations. **(15 Marks)**

(b) Justify each of the policies identified in (a) above to the shareholders of each of the companies concerned. **(10 Marks)**

(Total 25 Marks)

End of question paper

Present value interest factor of \$1 per period at i% for n periods, PVIFA (i,n).

Period	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%
1	0.990	0.980	0.971	0.962	0.952	0.943	0.935	0.926	0.917	0.909
2	1.970	1.942	1.913	1.886	1.859	1.833	1.808	1.783	1.759	1.736
3	2.941	2.884	2.829	2.775	2.723	2.673	2.624	2.577	2.531	2.487
4	3.902	3.808	3.717	3.630	3.546	3.465	3.387	3.312	3.240	3.170
5	4.853	4.713	4.580	4.452	4.329	4.212	4.100	3.993	3.890	3.791
6	5.795	5.601	5.417	5.242	5.076	4.917	4.767	4.623	4.486	4.355
7	6.728	6.472	6.230	6.002	5.786	5.582	5.389	5.206	5.033	4.868
8	7.652	7.325	7.020	6.733	6.463	6.210	5.971	5.747	5.535	5.335
9	8.566	8.162	7.786	7.435	7.108	6.802	6.515	6.247	5.995	5.759
10	9.471	8.983	8.530	8.111	7.722	7.360	7.024	6.710	6.418	6.145
11	10.368	9.787	9.253	8.760	8.306	7.887	7.499	7.139	6.805	6.495
12	11.255	10.575	9.954	9.385	8.863	8.384	7.943	7.536	7.161	6.814
13	12.134	11.348	10.635	9.986	9.394	8.853	8.358	7.904	7.487	7.103
14	13.004	12.106	11.296	10.563	9.899	9.295	8.745	8.244	7.786	7.367
15	13.865	12.849	11.938	11.118	10.380	9.712	9.108	8.559	8.061	7.606
16	14.718	13.578	12.561	11.652	10.838	10.106	9.447	8.851	8.313	7.824
17	15.562	14.292	13.166	12.166	11.274	10.477	9.763	9.122	8.544	8.022
18	16.398	14.992	13.754	12.659	11.690	10.828	10.059	9.372	8.756	8.201
19	17.226	15.678	14.324	13.134	12.085	11.158	10.336	9.604	8.950	8.365
20	18.046	16.351	14.877	13.590	12.462	11.470	10.594	9.818	9.129	8.514

Present value interest factor of \$1 per period at i% for n periods, PVIFA (i,n).

Period	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%
1	0.901	0.893	0.885	0.877	0.870	0.862	0.855	0.847	0.840	0.833
2	1.713	1.690	1.668	1.647	1.626	1.605	1.585	1.566	1.547	1.528
3	2.444	2.402	2.361	2.322	2.283	2.246	2.210	2.174	2.140	2.106
4	3.102	3.037	2.974	2.914	2.855	2.798	2.743	2.690	2.639	2.589
5	3.696	3.605	3.517	3.433	3.352	3.274	3.199	3.127	3.058	2.991
6	4.231	4.111	3.998	3.889	3.784	3.685	3.589	3.498	3.410	3.326
7	4.712	4.564	4.423	4.288	4.160	4.039	3.922	3.812	3.706	3.605
8	5.146	4.968	4.799	4.639	4.487	4.344	4.207	4.078	3.954	3.837
9	5.537	5.328	5.132	4.946	4.772	4.607	4.451	4.303	4.163	4.031
10	5.889	5.650	5.426	5.216	5.019	4.833	4.659	4.494	4.339	4.192
11	6.207	5.938	5.687	5.453	5.234	5.029	4.836	4.656	4.486	4.327
12	6.492	6.194	5.918	5.660	5.421	5.197	4.988	4.793	4.611	4.439
13	6.750	6.424	6.122	5.842	5.583	5.342	5.118	4.910	4.715	4.533
14	6.982	6.628	6.302	6.002	5.724	5.468	5.229	5.008	4.802	4.611
15	7.191	6.811	6.462	6.142	5.847	5.575	5.324	5.092	4.876	4.675
16	7.379	6.974	6.604	6.265	5.954	5.668	5.405	5.162	4.938	4.730
17	7.549	7.120	6.729	6.373	6.047	5.749	5.475	5.222	4.990	4.775
18	7.702	7.250	6.840	6.467	6.128	5.818	5.534	5.273	5.033	4.812
19	7.839	7.366	6.938	6.550	6.198	5.877	5.584	5.316	5.070	4.843
20	7.963	7.469	7.025	6.623	6.259	5.929	5.628	5.353	5.101	4.870