

THE PUBLIC ACCOUNTANTS EXAMINATIONS BOARD

A Committee of the Council of ICPAU

CPA(U) EXAMINATIONS

LEVEL TWO

CORPORATE FINANCIAL MANAGEMENT - PAPER 12

TUESDAY, 16 JUNE 2009

INSTRUCTIONS TO CANDIDATES

1. Time allowed: **3 hours 15 minutes**.
The first 15 minutes this examination have been designated for reading time. You may not start to write your answer during this time.
2. Section **A** has **one** compulsory question carrying 40 marks.
3. Section **B** has **four** questions and only **three** questions are to be attempted. Each question carries 20 marks.
4. Relevant formulae and tables are provided on pages 9 -11.
5. Please read further instructions in the answer book.

SECTION A**Question 1**

Magoba Financial Services Ltd (MFS) would like to expand its operations by diversifying into the manufacturing of sugar for export in a bid to spread its risk from concentrating mainly on financial services related work. MFS has made an agreed offer for the shares of People's Sugarcane Ltd (PSL). The statement of financial position of PSL as at 31 December 2008 is as shown below:

	Shs million	Shs million
Assets		
Non-current assets:		
Land and buildings		154
Plant and machinery		48
Fixtures and fittings		12
Motor vehicles		<u>43</u>
Current assets:		257
Inventories	51	
Trade receivables	60	
Prepayments	<u>2</u>	<u>113</u>
Total assets		<u><u>370</u></u>
Equity and liabilities		
Equity:		
Ordinary shares of 500 Shs nominal		49
Share premium		108
Retained profits		<u>127</u>
		284
Liabilities		
Non-current liabilities:		
12% debentures 2013	20	
Deferred taxation	<u>4</u>	24
Current liabilities		
Creditors	44	
Taxation	10	
Bank overdraft	<u>8</u>	<u>62</u>
Total equity and liabilities		<u><u>370</u></u>

In trying to value PSL, MFS hired KD Certified Public Accountants to do a due diligence. KD have produced the following revised estimates of the current market values of the non-current assets shown in PSL's statement of financial position:

	Shs million
Land and buildings	200
Plant and machinery	10
Fixtures and fittings	Nil
Motor vehicles	30

MFS expects to recover about 95% of PSL's trade receivables. They also have an option of redeeming PSL's debentures if they acquire the company. The current market price of these debentures is Shs 130 for every Shs 100 nominal.

MFS has issued share capital of Shs 2.2 billion (with a nominal value of Shs 1,000 per share). It has been agreed between MFS and PSL to complete the acquisition by means of share exchange based on a share price of Shs 7,000 for MFS and Shs 4,250 for PSL. At these prices, the P/E ratios of MFS and PSL are 20 and 12 respectively.

Required:

- (a) Calculate the value to MFS of each ordinary share in PSL.
(8 marks)
- (b) Suggest reasons why the price MFS is paying for PSL's shares is different from the amount calculated in (a) above.
(4 marks)
- (c) Calculate the number of shares in issue after the acquisition and the market value of the combined company on the basis of the prices used for the share exchange.
(4 marks)
- (d) Explain why the shareholders of both MFS and PSL might expect to benefit from the merger.
(4 marks)
- (e) The Managing Director of PSL would like to explore any opportunities of raising finance via the Uganda Securities Exchange (USE) to finance their investments.
Explain to him, briefly, what kind / type of finance is available via the USE and the advantage(s) or disadvantage(s) of each.
(6 marks)

- (f) At a recent CPD seminar conducted by Institute of Certified Public Accountants of Uganda (ICPAU), about ethical issues for financial managers, several speakers emphasized the need for members to steer clear of the ethical traps: namely **insider dealing, conflict of interest, and money laundering**, most especially during these times of the prevailing global **credit crunch**. The Managing Director of MFS was confused by these four mentioned terms.

Briefly explain to the Managing Director the meaning of each of the above mentioned terms.

(8 marks)

- (g) Explain the term 'corporate restructuring' and give **four** ways in which corporate restructuring can be done.

(6 marks)

(Total 40 marks)

SECTION B

Question 2

The following information has been obtained from the books of Merks Financial Services Ltd. The company's ordinary shares have just gone cum-div at Shs 3,867. A dividend of Shs 122.5 per share has just been paid. The company's loans have a market value of Shs 80 for every Shs 100 nominal.

The following are extracts from the statements of comprehensive income for Merks Financial Services Ltd for the years ended 31 December:

	2008	2007
	Shs million	Shs million
Operating profit	228.2	173.5
Interest paid	<u>(100)</u>	<u>(100)</u>
Profit before tax	128.2	73.5
Taxation	<u>(38.3)</u>	<u>(22.1)</u>
Profit after tax	89.9	51.4
Transfer to reserves	<u>(46.9)</u>	<u>(50.2)</u>
Retained profit for the year	<u><u>43</u></u>	<u><u>1.2</u></u>

Extracts from statements of financial position for the years ended 31 December

	2008	2007
	Shs million	Shs million
8% irredeemable loan stock	1,250	1,250
Ordinary share capital(nominal value Shs 500)	219.18	219.18
Share premium	164.02	168.52
Retained profits	439.01	376.52

The company pays tax at 30% and growth over the past years has been financed by long term stock. The company's required rate of return from all new investments is 20%. Although they might have wished to issue more loan stock, they are disappointed by the current price of existing loan stock. Over the past years, management has maintained a dividend payout ratio of 65%.

Required:

- (a) Calculate the cost of equity capital, the post tax cost of loan stock, and the weighted average cost of capital (WACC) for the company, using market values for weighting.
(8 marks)
 - (b) Comment on the performance of Merks Financial Services Ltd based on the following ratios (calculated on book values).
 - (i) Financial gearing.
 - (ii) Interest coverage.
 - (iii) Return on equity.**(6 marks)**
 - (c) Give the circumstances under which the capital asset pricing model (CAPM) other than WACC should be used in the investment appraisal process.
(3 marks)
 - (d) What are the weaknesses of using CAPM to estimate a firm's cost of capital?
(3 marks)
- (Total 20 marks)**

Question 3

Chamuka Construction Ltd (CCL) has won a contract to supply housing units to the Blue Cross, a charitable organisation, for donation to internally displaced persons in 12 months time. Being a new company, they do not have the Shs 2.5 billion required for this project. They have only Shs 500 million at hand and the Blue Cross will only pay them after the houses are complete in a year's time. They urgently need to raise Shs 2 billion now to start construction. The People's Development Bank (PDB) has agreed to lend them US dollars (USD) equivalent at an annual interest rate of 10.5% per annum. On the other hand, Pemba Community Bank (PCB) can lend them the Shs 2 billion at an interest rate of 16% per annum.

The principal amount borrowed and the interest thereon will be repaid at the end of the year.

The current spot exchange rate between the shilling and the US dollar is Shs 1,920/1 USD. Inflation in Uganda is at 8% per annum whereas that in USA is 3% per annum. CCL receives all its income in shillings.

Required:

- (a) The Managing Director is of the view that they should go ahead with PDB because the interest is lower but the Treasury Manager is cautioning him to first consider the exchange risk.
Advise the Managing Director on which option they should opt for.
(6 marks)
- (b) One way of handling risk associated with foreign exchange is to use a currency swap. Explain the term 'currency swap' and give **two** advantages and **two** challenges of using currency swaps.
(6 marks)
- (c) Define the term 'currency option contracts' and explain why options are normally more expensive than forward contracts.
(3 marks)
- (d) Define the term 'yield curve' and briefly explain the factors that determine the shape of the yield curve.
(5 marks)

(Total 20 marks)

Question 4

Rambodia Telecom (RT) is a telecommunications retailer and has a company website through which customers can make purchases if they wish, instead of going to the company's premises. This website is currently being managed by a third party, but RT is not satisfied with the service level of this third party.

The IT Department Business Analyst of RT conducted a research into ways of having the company manage its own website other than using third parties. They have zeroed on one option and also gone ahead with a cash flow analysis to show the likely costs and savings from this option. They intend to implement this at the beginning of 2010. Below are the projected savings and costs of the option under consideration, estimated to cost Shs 2,000 million as initial cost:

Year	2010	2011	2012	2013	2014
	Shs million	Shs million	Shs million	Shs million	Shs million
Third party charges saved	3,000	3,672	3,995	4,139	4,546
Cash operating costs	(1,560)	(2,410)	(2,992)	(3,409)	(3,782)
Depreciation	(600)	(600)	(600)	(600)	(600)
Interest	<u>(300)</u>	<u>(300)</u>	<u>(300)</u>	<u>(300)</u>	<u>(300)</u>
Profit before tax	<u>540</u>	<u>361.8</u>	<u>103.5</u>	<u>(170.4)</u>	<u>(135.6)</u>

It is estimated that half of the funds will be obtained partly from retained earnings and the balance by raising a loan at an interest rate of 15%.

The Uganda Revenue Authority gives such investments capital allowances, which may be set against taxable profits at the rate of 25% per annum on a reducing balance basis. This company pays tax at a rate of 30% and the tax is paid one year in arrears.

While making the above estimates, the Business Analyst incorporated the expected inflation, over the next five years, which is expected to be 8.4% per annum. The project has no salvage value at the end of the five years, and the company's real cost of capital is 8%.

Required:

- (a) Evaluate the project, using the information provided and comment on its viability.
(10 marks)
- (b) The IT Operations Manager would prefer a project that will cost the company nothing in terms of financing charges. He prefers the use of retained earnings to finance such capital projects. Evaluate his view.
(3 marks)
- (c) Briefly explain the term sensitivity analysis and how it may be used to incorporate risk in investment appraisal.
(4 marks)
- (d) Differentiate between hard and soft capital rationing. Why may capital rationing lead to less than optimal investment decisions?
(3 marks)

(Total 20 marks)

Question 5

Mitro Ltd is a Ugandan based supermarket chain with a number of wholly owned subsidiaries in Southern Sudan, Kenya, Rwanda and other interests throughout Africa. In response to the rapid growth of the company, the Managing Director, Mr. Sunde Kanana, has ordered for a review of the company's organizational structure, particularly the finance function. Mr. Kanana is of the opinion that a separate treasury department should be established. At present, treasury functions are the responsibility of the chief accountant.

Required:

- (a) Describe the main responsibilities of a treasury department in a company such as Mitro Ltd and explain the benefits which might accrue from the establishment of a separate treasury function.
(15 marks)
- (b) Describe the advantages and disadvantages which might arise, if the company established a separate treasury department as a profit centre rather than a cost centre.
(5 marks)

(Total 20 marks)

You may use the following list of financial formulae:

The Capital Asset Pricing Model

$$E r_i = R_f + \beta_i (E r_m - R_f)$$

The asset beta formula

$$\beta_a = \left(\frac{V_e \beta_e}{(V_e + V_d(1-T))} \right) + \left(\frac{V_d(1-T) \beta_d}{(V_e + V_d(1-T))} \right)$$

The Gordon model

$$P_0 = \frac{D_0(1+g)}{r_e - g}$$

Gordon's growth approximation

$$g = b r_e$$

The Fisher formula

$$(1+m) = (1+r)(1+i)$$

Purchasing power parity and interest rate parity

$$S_1 = S_0 \frac{(1+i_c)}{(1+i_b)} \quad S_1 = S_0 \frac{(1+r_c)}{(1+r_b)}$$

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%	11%	12%
1	0.990	0.980	0.971	0.962	0.952	0.943	0.935	0.926	0.917	0.909	0.901	0.893
2	0.980	0.961	0.943	0.925	0.907	0.890	0.873	0.856	0.840	0.823	0.807	0.791
3	0.971	0.942	0.915	0.888	0.861	0.845	0.829	0.813	0.797	0.781	0.766	0.751
4	0.962	0.923	0.887	0.852	0.826	0.801	0.776	0.752	0.728	0.704	0.681	0.658
5	0.952	0.903	0.869	0.835	0.801	0.777	0.753	0.730	0.707	0.684	0.662	0.640
6	0.943	0.884	0.852	0.819	0.786	0.763	0.740	0.718	0.696	0.674	0.653	0.632
7	0.935	0.876	0.845	0.813	0.781	0.759	0.737	0.715	0.694	0.673	0.652	0.632
8	0.926	0.867	0.837	0.806	0.775	0.754	0.733	0.712	0.691	0.671	0.651	0.631
9	0.917	0.858	0.829	0.799	0.769	0.748	0.728	0.707	0.687	0.667	0.647	0.627
10	0.909	0.849	0.821	0.792	0.763	0.742	0.722	0.702	0.682	0.662	0.642	0.623
11	0.901	0.841	0.813	0.785	0.756	0.735	0.715	0.695	0.675	0.655	0.635	0.616
12	0.893	0.833	0.806	0.778	0.749	0.728	0.708	0.688	0.668	0.648	0.628	0.609
13	0.885	0.825	0.798	0.771	0.742	0.721	0.701	0.681	0.661	0.641	0.621	0.602
14	0.877	0.817	0.790	0.763	0.734	0.713	0.693	0.673	0.653	0.633	0.613	0.594
15	0.869	0.809	0.782	0.755	0.726	0.705	0.685	0.665	0.645	0.625	0.605	0.586

	13%	14%	15%	16%	17%	18%	19%	20%	21%	22%	23%	24%
1	0.885	0.877	0.870	0.862	0.855	0.847	0.840	0.833	0.826	0.819	0.812	0.805
2	0.783	0.766	0.750	0.734	0.718	0.702	0.686	0.670	0.654	0.638	0.622	0.606
3	0.693	0.677	0.662	0.646	0.630	0.614	0.598	0.582	0.566	0.550	0.534	0.518
4	0.613	0.598	0.583	0.567	0.551	0.535	0.519	0.503	0.487	0.471	0.455	0.439
5	0.543	0.528	0.513	0.497	0.481	0.465	0.449	0.433	0.417	0.401	0.385	0.369

6	0.48 0	0.45 6	0.43 2	0.41 0	0.39 0	0.37 0	0.35 2	0.33 5	0.31 9	0.30 3	0.28 9	0.27 5
7	0.42 5	0.40 0	0.37 6	0.35 4	0.33 3	0.31 4	0.29 6	0.27 9	0.26 3	0.24 9	0.23 5	0.22 2
8	0.37 6	0.35 1	0.32 7	0.30 5	0.28 5	0.26 6	0.24 9	0.23 3	0.21 8	0.20 4	0.19 1	0.17 9
9	0.33 3	0.30 8	0.28 4	0.26 3	0.24 3	0.22 5	0.20 9	0.19 4	0.18 0	0.16 7	0.15 5	0.14 4
10	0.29 5	0.27 0	0.24 7	0.22 7	0.20 8	0.19 1	0.17 6	0.16 2	0.14 9	0.13 7	0.12 6	0.11 6
11	0.26 1	0.23 7	0.21 5	0.19 5	0.17 8	0.16 2	0.14 8	0.13 5	0.12 3	0.11 2	0.10 3	0.09 4
12	0.23 1	0.20 8	0.18 7	0.16 8	0.15 2	0.13 7	0.12 4	0.11 2	0.10 2	0.09 2	0.08 3	0.07 6
13	0.20 4	0.18 2	0.16 3	0.14 5	0.13 0	0.11 6	0.10 4	0.09 3	0.08 4	0.07 5	0.06 8	0.06 1
14	0.18 1	0.16 0	0.14 1	0.12 5	0.11 1	0.09 9	0.08 8	0.07 8	0.06 9	0.06 2	0.05 5	0.04 9
15	0.16 0	0.14 0	0.12 3	0.10 8	0.09 5	0.08 4	0.07 4	0.06 5	0.05 7	0.05 1	0.04 5	0.04 0

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

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

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