

THE PUBLIC ACCOUNTANTS EXAMINATIONS BOARD

A Committee of the Council of ICPAU

CPA(U) EXAMINATIONS

LEVEL TWO

CORPORATE FINANCIAL MANAGEMENT - PAPER 12

WEDNESDAY, 28 NOVEMBER 2012

INSTRUCTIONS TO CANDIDATES

1. Time allowed: **3 hours 15 minutes**.

The first 15 minutes of 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 8 - 11.
5. Write your answer to each question on a fresh page in your answer booklet.
6. Please, read further instructions on the answer booklet, before attempting any question.

SECTION A

This section has one compulsory question to be attempted.

Question 1

The management of Bungo Insurmountable Ltd (BIL) has contacted you to prepare for them a four year financial plan.

BIL's performance for the last two years is summarised in their financial statements below;

Statement of Comprehensive Income for the year ended 30 June:

	2012	2011
	Shs million	Shs million
Sales turnover	1,639	1,504
Operating costs before depreciation	<u>(1,225)</u>	<u>(1,124)</u>
EBITDA	414	380
Tax allowable depreciation	<u>(152)</u>	<u>(139)</u>
EBIT	262	241
Net interest payable	<u>(57)</u>	<u>(52)</u>
Profit before tax	205	189
Tax at 30%	<u>(62)</u>	<u>(57)</u>
Dividends	<u>(80)</u>	<u>(73)</u>
Amount transferred to reserves	<u><u>63</u></u>	<u><u>59</u></u>

Statement of Financial Position as at 30 June:

	2012		2011	
	Shs million	Shs million	Shs million	Shs million
Non-current assets:				
Land and buildings	310		284	
Plant and machinery (net)	1,012		928	
Investments	<u>32</u>	1,354	<u>29</u>	1,241
Current assets:				
Inventories	448		411	
Trade receivables	564		517	
Cash	<u>20</u>	<u>1,032</u>	<u>18</u>	<u>946</u>
		<u><u>2,386</u></u>		<u><u>2,187</u></u>
Equity and liabilities:				
Short term loans and overdrafts	230		209	
Other Payables	472		433	
Borrowings (8% fixed rate)	<u>580</u>	1,282	<u>532</u>	1,174
Called up share capital (10 cents par)	240	<u>1,104</u>	220	<u>1,013</u>
		<u><u>2,386</u></u>		<u><u>2,187</u></u>

For your analysis, the following assumptions have been agreed by management of BIL and approved by the Finance Committee of the board;

- (i) Historically sales growth has been 9% per annum and is expected to remain the same for the next four years after 2012 due to uncertainty about future economic prospects.
- (ii) Cash operating costs are estimated to be approximately 68% of sales.
- (iii) Tax allowable depreciation for last year was approximately 15% of the net book value of plant and machinery at year end. This is expected to continue for the next four years.
- (iv) Inventories, trade receivables, cash in hand and other payables are assumed to increase in proportion to the increase in sales.
- (v) Investment in, and net book value of, plant and machinery is expected to increase in line with sales. No investment is planned in other non-current assets other than a refurbishment of buildings at an estimated cost of Shs 40 million in 2015.
- (vi) Any change in interest paid as a result of changes in borrowing may be assumed to be effective in the next year. BIL plans to meet any changes in financing needs, with the exception of the repayment of the fixed rate loan, by adjusting its overdraft.
- (vii) BIL currently pays 7% per annum interest on its short-term borrowing and short-term borrowings are expected to increase by 15% for two years after 2012 increasing to 26% in 2015 and reducing by 14% in 2016.
- (viii) Income tax is expected to continue at its present rate over the next four years.
- (ix) The company plans to maintain its dividend policy of paying a constant percentage of earnings after tax.
- (x) Existing borrowing covenants prevent BIL's gearing ratio (book value of total loans to book value of total loans plus equity) exceeding 40% for a period of more than one year.
- (xi) The investment yield small interest and borrowings are scheduled to be repaid at the end of 2014 and will be refinanced with a similar type of loan in 2014.

The company's current share price is Shs 2.1, and the weighted average cost of capital is 11%.

Required:

- (a) Prepare a statement of financial position and statement of comprehensive income for each of the next four years after 2012. Clearly state any assumptions that you make.

(16 marks)

- (b) Using financial ratios, highlight any potential financial problems for the company after 2012 and discuss what actions might be taken with respect to these problems.
(12 marks)
- (c) Distinguish between stock 'split and repurchase' and give reasons why companies do stock repurchase.
(6 marks)
- (d) Give advantages and disadvantages of a centralised treasury management system to an organisation like BIL.
(6 marks)
- (Total 40 marks)**

SECTION B

Attempt three of the four questions in this section.

Question 2

You have been appointed as finance manager for Fumigator Limited (FL), one of the largest cleaning firms in Gabor city of Banana Republic. As one of your first tasks, the executive director asked you to produce a briefing memo to the board of directors on the subject of mergers and acquisitions and the subsequent stakeholder's conflict.

Required:

Prepare a memo, identifying and discussing:

- (a) the key stakeholders and their stake in an organisation like FL.
(4 marks)
- (b) the likely conflicts that might exist between shareholders and bond holders in mergers and acquisitions.
(4 marks)
- (c) examples of covenants that might be attached to bonds to avoid the above conflicts.
(6 marks)
- (d) the possible synergies that might occur in mergers and acquisitions.
(6 marks)
- (Total 20 marks)**

Question 3

The executive director of Muhavura Ltd (ML) wishes to estimate the impact which the introduction of debt financing is likely to have on the company's overall cost of capital. ML is currently financed only by equity.

ML summarised capital structure

	Shs million
Ordinary shares (5 Shs par value)	1,000
Reserves	<u>1,100</u>
	<u>2,100</u>

Notes:

- (a) The company's current share price is Shs 300.
- (b) ML has the capacity to raise up to Shs 400 million of fixed rate five year debt at an interest rate of 10% per annum.
- (c) The income tax rate is 30%.
- (d) ML's current earnings before interest and tax are Shs 72.5 million. These earnings are not expected to change significantly for the foreseeable future.

The company is considering raising either:

- (i) Shs 200 million in debt financing or;
- (ii) Shs 400 million in debt financing.

In either case, debt financing will be used to repurchase ordinary shares.

Required:

- (a) Using Miller and Modigliani's model in a world with corporate tax, estimate the impact on LM's cost of capital of raising the finances in either (i) and / or (ii) above. State clearly any assumptions that you make.
(12 marks)
- (b) Critically evaluated whether or not the estimates produced in part (a) above are likely to be accurate.
(8 marks)

(Total 20 marks)

Question 4

At the end of December 2012 the finance manager of Uganda National Pension Fund (UPUF) will be reviewing strategy regarding their fund management. Currently, at UPUF over 50% of the funds are invested in fixed rate long-term bonds and the interest rates are expected to be quite volatile for the next few years.

Among the pension fund's current investments are two AA rated bonds:

- 1 Zero coupons December 2027.
- 2 12% gilt June 2027 (interest is payable semi-annually).

The current annual redemption yield (yield to maturity) on both bonds is 6%.

The semi-annual yield may be assumed to be 3%.

Both bonds have a par value and redemption value of Shs 100.

Required:

- (a) Distinguish between the terms 'coupon rate' and 'yield to maturity'.
(4 marks)
- (b) Briefly discuss possible reasons for an upward sloping yield curve.
(6 marks)
- (c) Estimate the market price of each of the bonds if interest rates (yields):
 - (i) increase by 1%.
 - (ii) decrease by 1%.

The changes in interest rates may be assumed to be parallel shifts in the yield curve (yield changes by an equal amount at all points of the yield curve).

(10 marks)
(Total 20 marks)

Question 5

Kisoro Impers Ltd (KIL) is the parent of a group of companies controlled from Uganda with branches in Kenya, Tanzania and South Sudan. The treasury department of KIL has forecasted that by the end of the month, intercompany indebtedness will be as follows;

The Tanzanian branch will be owed TShs 144,381,000 by the Kenyan branch and will owe the South Sudan branch \$ 1,060,070.

On the other hand, the Kenyan branch will be owed Kshs 14,438,000 by the South Sudan branch and will owe it \$ 800,000 in turn.

It is the function of KIL central treasury department to net off intercompany balances as far as possible and to issue instructions for settlement of the net balance.

The following currencies are used in the respective branch's countries;

- Tanzania – Tanzanian shilling (TShs)
- Kenya – Kenyan shilling (KShs)
- South Sudan – South Sudanese dollar (\$)

The exchange rates in terms of 1 Ugandan shilling are:

- \$ 1.415
- KShs 10.215 and
- TShs 68.10

Required:

- (a) Calculate the net payments to be made in respect of the above balances.

(8 marks)

- (b) With examples, explain the meaning of the following terms in relation to hedge accounting:

- (i) leading and lagging.
- (ii) matching.
- (iii) economic exposure.
- (iv) transaction exposure.
- (v) translation accounting exposure.

(12 marks)

(Total 20 marks)

FINANCIAL FORMULAE

The capital asset pricing model

$$E_r_i = R_f + \beta_i (E_{r_m} - R_f)$$

The asset beta formula

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

The Gordon model

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

Gordon's growth approximation

$$g = b r_e$$

Purchasing power parity and interest rate parity

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

The Fisher formula

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

Economic Order Quantity (EOQ)

$$EOQ = \sqrt{\frac{2C_0D}{C_H}}$$

Weighted Average Cost of Capital (WACC)

$$WACC = \left[\frac{V_e}{V_e + V_d} \right] k_e + \left[\frac{V_d}{V_e + V_d} \right] k_d (1 - T)$$

Modigliani and Miller Proposition 2 (with tax)

$$k_e = k_e^i + (1 - T)(k_e^i - k_d) \frac{V_d}{V_e}$$

Two-Asset Portfolio

$$S_p = \sqrt{w_a^2 s_a^2 + w_b^2 s_b^2 + 2w_a w_b r_{ab} s_a s_b}$$

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	0.857	0.842	0.826	0.812	0.797
3	0.971	0.942	0.915	0.889	0.864	0.840	0.816	0.794	0.772	0.751	0.731	0.712
4	0.961	0.924	0.888	0.855	0.823	0.792	0.763	0.735	0.708	0.683	0.659	0.636
5	0.951	0.906	0.863	0.822	0.784	0.747	0.713	0.681	0.650	0.621	0.593	0.567
6	0.942	0.888	0.837	0.790	0.746	0.705	0.666	0.630	0.596	0.564	0.535	0.507
7	0.933	0.871	0.813	0.760	0.711	0.665	0.623	0.583	0.547	0.513	0.482	0.452
8	0.923	0.853	0.789	0.731	0.677	0.627	0.582	0.540	0.502	0.467	0.434	0.404
9	0.914	0.837	0.766	0.703	0.645	0.592	0.544	0.500	0.460	0.424	0.391	0.361
10	0.905	0.820	0.744	0.676	0.614	0.558	0.508	0.463	0.422	0.386	0.352	0.322
11	0.896	0.804	0.722	0.650	0.585	0.527	0.475	0.429	0.388	0.350	0.317	0.287
12	0.887	0.788	0.701	0.625	0.557	0.497	0.444	0.397	0.356	0.319	0.286	0.257
13	0.879	0.773	0.681	0.601	0.530	0.469	0.415	0.368	0.326	0.290	0.258	0.229
14	0.870	0.758	0.661	0.577	0.505	0.442	0.388	0.340	0.299	0.263	0.232	0.205
15	0.861	0.743	0.642	0.555	0.481	0.417	0.362	0.315	0.275	0.239	0.209	0.183

	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	0.820	0.813	0.806
2	0.783	0.769	0.756	0.743	0.731	0.718	0.706	0.694	0.683	0.672	0.661	0.650
3	0.693	0.675	0.658	0.641	0.624	0.609	0.593	0.579	0.564	0.551	0.537	0.524
4	0.613	0.592	0.572	0.552	0.534	0.516	0.499	0.482	0.467	0.451	0.437	0.423
5	0.543	0.519	0.497	0.476	0.456	0.437	0.419	0.402	0.386	0.370	0.355	0.341
6	0.480	0.456	0.432	0.410	0.390	0.370	0.352	0.335	0.319	0.303	0.289	0.275
7	0.425	0.400	0.376	0.354	0.333	0.314	0.296	0.279	0.263	0.249	0.235	0.222
8	0.376	0.351	0.327	0.305	0.285	0.266	0.249	0.233	0.218	0.204	0.191	0.179
9	0.333	0.308	0.284	0.263	0.243	0.225	0.209	0.194	0.180	0.167	0.155	0.144
10	0.295	0.270	0.247	0.227	0.208	0.191	0.176	0.162	0.149	0.137	0.126	0.116
11	0.261	0.237	0.215	0.195	0.178	0.162	0.148	0.135	0.123	0.112	0.103	0.094
12	0.231	0.208	0.187	0.168	0.152	0.137	0.124	0.112	0.102	0.092	0.083	0.076
13	0.204	0.182	0.163	0.145	0.130	0.116	0.104	0.093	0.084	0.075	0.068	0.061
14	0.181	0.160	0.141	0.125	0.111	0.099	0.088	0.078	0.069	0.062	0.055	0.049
15	0.160	0.140	0.123	0.108	0.095	0.084	0.074	0.065	0.057	0.051	0.045	0.040

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