UNIVERSITY OF SWAZILAND

DEPARTMENT OF ACCOUNTING

MAIN EXAMINATION PAPER 2006

DEGREE/DIPLOMA AND YEAR OF STUDY: B. COMM V

TITLE OF PAPER   :   BUSINESS FINANCE II

TIME ALLOWED   :   THREE (3) HOURS

INSTRUCTIONS   1.   TOTAL NUMBER OF QUESTIONS ON THIS PAPER: FOUR (4).

2.   ANSWER ALL QUESTIONS

3.   THE MARKS AWARDED FOR A QUESTION/PART ARE INDICATED AT THE END OF EACH QUESTION/PART OF QUESTION.

4.   ALL CALCULATIONS ARE TO BE MADE TO THE NEAREST LILANGENI

5.   WHERE APPLICABLE, SUBMIT ALL WORKING CALCULATIONS

NOTE: YOU ARE REMINDED THAT IN ASSESSING YOUR WORK, ACCOUNT WILL BE TAKEN OF ACCURACY OF THE LANGUAGE AND THE GENERAL QUALITY OF EXPRESSION, TOGETHER WITH THE LAYOUT AND PRESENTATION OF YOUR FINAL ANSWER.

SPECIAL REQUIREMENTS: P.V. TABLES

THIS PAPER IS NOT TO BE OPENED UNTIL PERMISSION HAS BEEN GRANTED BY THE INVIGILATOR.

QUESTION 1

The following is an extract from the balance sheet of Masiza Ltd at 30 June, 2005.

	E000
Ordinary shares of 50cents each	5,200
Reserves	4.850
9% preference share of E1 each	4,500
14% debentures	5,000
Total long-term funds	19,550

The ordinary shares are quoted at 80 cents. Assume that the market estimates of the next ordinary dividend is 4 cents, growing thereafter at 12% per annum indefinitely. The preference shares, which are irredeemable, are quoted at 72 cents and the debentures are quoted at par. Company tax is 35%.

(a)   You are required to use the relevant data above to estimate the company's weighted average cost of capital (WACC).

(6 Marks)

(b)   You are required to explain how the Capital Asset Pricing Model would be used as an alternative method of establishing the cost of equity, indicating what information would be required and how it would be obtained.

(7 Marks)

(c)   Assume that the debentures have recently been issued specifically to fund the company's expansion programmes under which a number of projects are being considered. It has been suggested at project appraisal meeting that because these projects are to be financed by the debentures, the cutoff rate for project acceptance should be the after-tax interest rate on the debentures rather that the WACC.

(6 Marks)

You are required to comment on this suggestion.

(d)   It has been suggested that the value of a geared firm is given by the following equation: vg = vu + dt

(i)   I f the above equation is valid, what would be the most appropriate capital structure of most firms?

(6 Marks)

(Total: 25   Marks)

QUESTION 2

Thamie Ltd is a manufacturer of car care products. It carries insignificant amounts of stock. Turnover and profits after tax for last year are E145 million and E40 million respectively.

Thamie Ltd shares are currently quoted at 440 cents, the lowest price for five years. The directors believe that this is because the company is not growing as fast as the market expects. They believe that the fastest way to grow, and as a result improve the share price performance, is to acquire another company in a similar line of business with a lower P/E ratio. They are therefore evaluating Zodwa Ltd on the basis that its earnings can be "bootstrapped", ie on the assumption that, once the merger has been completed, the combined company's P/E ratio will be the same as Thamie Ltd current ratio.

Zodwa's results for the past three years and its directors' own estimate for this year are as follows:

Year to 31 December	Turnover E million	Profit after tax E million
2003 actual	95	12.1
2004 actual	100	12.5
2005 actual	106	13.5
2006 estimate	120	14.0

Zodwa's Ltd's dividend payout ratio has been maintained at 50% for the past eight years. The company pays only one dividend per year at the end of December. Its shares are currently being traded at 126 cents.

Summary balance sheets at 31 December 2005 for the two companies are as follows:

	Thamie Ltd E million	Zodwa Ltd E million
Fixed assets (net of depreciation)	60.0	75.0
Net current assets	30.0	25.0
Total assets less current liabilities	90.00	100.0
CAPITAL AND RESEARVES		
Called Capital up share capital	25.0 Note 1	50.0 Note 2
Reserves	65.0	50.0
	90.0	100.0

Notes: 1.   100 million ordinary shares of 25 cents
2.   100 million ordinary shares of 50 cents

If the merger goes ahead, some fixed assets of Zodwa Ltd will not be needed following the merger and will be sold at the end of the first year of operations. The estimated sales receipts from these assets at the time of sale is E25 million, which will also be the written-down book value at that time. No other savings or synergies have been identified by the directors of Zodwa Ltd at this stage.

Zodwa Ltd's financial advisors believe that its directors are over-valuing Zodwa Ltd's future earnings post-tax. They advise that, in their opinion, the merged company should be more prudently valued and suggest that Zodwa Ltd's growth for the foreseeable future is likely to be maintained at no more than the average of the last four years.

The cost of capital for Thamie Ltd is 14% and for Zodwa Ltd is 12%.

You are required:

(a)   to estimate the maximum price, in total and per share, that Thamie Ltd might bid for the whole of the share capital in Zodwa Ltd under both of the following assumptions:

(i)   the directors of Thamie Ltd are correct
(ii)   the financial advisors are correct
and comment briefly on the weaknesses of the methods of valuation you have used
(12 Marks)

(b)   to advise the directors of Thamie Ltd on an initial bid price and maximum price which they should offer for the shares of Zodwa Ltd.
(6 Marks)

(c)   to describe four possible defence tactics which the directors of Zodwa Ltd might use if they decide to resist the bid from Thamie Ltd.
(7 Marks)

(Total: 25 Marks)

QUESTION 3

The following financial data relate to Banele Ltd.

Year	Earnings per share (Cents)	Dividend per share (Cents)	Share Price (Cents)
2002	42	17	252
2003	46	18	184
2004	51	20	255
2005	55	22	275
2006	62	25	372

A firm of market analysts which specialises in the industry in which Banele Ltd operates has recently re-evaluated the company's future prospects. The analysts estimate that Banele Ltd earnings and dividends will grow at 25% for the next two years. Thereafter, earnings are likely to increase at a lower annual rate of 10%. If this reduction in earnings growth occurs, the analysts consider that the dividend payout ratio will be increased to 50%.

Banele Ltd is all equity-financed and has one million ordinary shares in issue. The tax rate of 33% is not expected to change in the foreseeable future.

You are required:

(a)   to calculate the estimated share price and P/E which the analysts now expect to Banele Ltd using the dividend valuation model and comment briefly on the method of valuation you have just used. Assume a constant post-tax cost of capital of 18 per cent.   (10 Marks)

(b)   to comment on whether the dividend policy being considered by the analysts would be appropriate for the company in the following two sets of circumstances;
   (i)   the company's shareholders are mainly financial institutions, and
   (ii)   the company's shareholders are mainly small private investors;
                                                                                        (8 Marks)

(c)   to describe briefly three other dividend policies which Banele Ltd could consider.
                                                                                        (7 Marks)

(Total: 25 Marks)

QUESTION 4

A professional Human Resources institute in Swaziland is evaluating an investment project overseas - in Eastasia, a politically stable country. The project involves the establishment of a training school to offer courses on Human Resource and management topics. It will cost an initial 5 million Eastasian dollars (EA$) and it is expected to earn post-tax cashflows as follows:

Year	1	2	3	4
Cashflow (EA$000)	1500	1900	2500	2700

The following information is available:

- The expected inflation rate in Eastasia is 3% a year.
- Real interest rates in the two countries are the same. They are expected to remain the same for the period of the project.
- The current spot rate is EA$ 2 per E1
- The risk-free rate of interest in Eastasia is 7% and in Swaziland 9%
- The company requires a lilangeni return from this project of 16%.

Requirement:

(a)   Calculate the Emalangeni net present value of the project using BOTH the following methods:
  (i)   by discounting annual cash flows in Emalangeni
  (ii)   by discounting annual cash flows in Eastasian $

(18 Marks)

(b)   The Chief Finance Officer of the institute has noted that borrowing rates in Scandinavia are below those in most other countries and suggests that the institute should borrow Scandinavian currency to finance the project.

Requirement:

Discuss the main methods of financing overseas operations and the issues the company should consider before making a decision about whether to borrow Scandinavian currency.

(7 Marks)

(Total: 25 Marks)

Present Value Table

Present value of 1 i.e. $(1 + r)^{-n}$
where r = discount rate
n = number of periods until payment

Discount rates (r)

Periods (n)	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	1
2	0·980	0·961	0·943	0·925	0·907	0·890	0·873	0·857	0·842	0·826	2
3	0·971	0·942	0·915	0·889	0·864	0·840	0·816	0·794	0·772	0·751	3
4	0·961	0·924	0·888	0·855	0·823	0·792	0·763	0·735	0·708	0·683	4
5	0·951	0·906	0·863	0·822	0·784	0·747	0·713	0·681	0·650	0·621	5
6	0·942	0·888	0·837	0·790	0·746	0·705	0·666	0·630	0·596	0·564	6
7	0·933	0·871	0·813	0·760	0·711	0·665	0·623	0·583	0·547	0·513	7
8	0·923	0·853	0·789	0·731	0·677	0·627	0·582	0·540	0·502	0·467	8
9	0·914	0·837	0·766	0·703	0·645	0·592	0·544	0·500	0·460	0·424	9
10	0·905	0·820	0·744	0·676	0·614	0·558	0·508	0·463	0·422	0·386	10
11	0·896	0·804	0·722	0·650	0·585	0·527	0·475	0·429	0·388	0·350	11
12	0·887	0·788	0·701	0·625	0·557	0·497	0·444	0·397	0·356	0·319	12
13	0·879	0·773	0·681	0·601	0·530	0·469	0·415	0·368	0·326	0·290	13
14	0·870	0·758	0·661	0·577	0·505	0·442	0·388	0·340	0·299	0·263	14
15	0·861	0·743	0·642	0·555	0·481	0·417	0·362	0·315	0·275	0·239	15

	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	1
2	0·812	0·797	0·783	0·769	0·756	0·743	0·731	0·718	0·706	0·694	2
3	0·731	0·712	0·693	0·675	0·658	0·641	0·624	0·609	0·593	0·579	3
4	0·659	0·636	0·613	0·592	0·572	0·552	0·534	0·516	0·499	0·482	4
5	0·593	0·567	0·543	0·519	0·497	0·476	0·456	0·437	0·419	0·402	5
6	0·535	0·507	0·480	0·456	0·432	0·410	0·390	0·370	0·352	0·335	6
7	0·482	0·452	0·425	0·400	0·376	0·354	0·333	0·314	0·296	0·279	7
8	0·434	0·404	0·376	0·351	0·327	0·305	0·285	0·266	0·249	0·233	8
9	0·391	0·361	0·333	0·308	0·284	0·263	0·243	0·225	0·209	0·194	9
10	0·352	0·322	0·295	0·270	0·247	0·227	0·208	0·191	0·176	0·162	10
11	0·317	0·287	0·261	0·237	0·215	0·195	0·178	0·162	0·148	0·135	11
12	0·286	0·257	0·231	0·208	0·187	0·168	0·152	0·137	0·124	0·112	12
13	0·258	0·229	0·204	0·182	0·163	0·145	0·130	0·116	0·104	0·093	13
14	0·232	0·205	0·181	0·160	0·141	0·125	0·111	0·099	0·088	0·078	14
15	0·209	0·183	0·160	0·140	0·123	0·108	0·095	0·084	0·074	0·065	15

Annuity Table

Present value of an annuity of 1 i.e. $\dfrac{1 - (1 + r)^{-n}}{r}$

where r = interest rate
n = number of periods

Interest rates (r)

Periods (n)	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	1
2	1·970	1·942	1·913	1·886	1·859	1·833	1·808	1·783	1·759	1·736	2
3	2·941	2·884	2·829	2·775	2·723	2·673	2·624	2·577	2·531	2·487	3
4	3·902	3·808	3·717	3·630	3·546	3·465	3·387	3·312	3·240	3·170	4
5	4·853	4·713	4·580	4·452	4·329	4·212	4·100	3·993	3·890	3·791	5
6	5·795	5·601	5·417	5·242	5·076	4·917	4·767	4·623	4·486	4·355	6
7	6·728	6·472	6·230	6·002	5·786	5·582	5·389	5·206	5·033	4·868	7
8	7·652	7·325	7·020	6·733	6·463	6·210	5·971	5·747	5·535	5·335	8
9	8·566	8·162	7·786	7·435	7·108	6·802	6·515	6·247	5·995	5·759	9
10	9·471	8·893	8·530	8·111	7·722	7·360	7·024	6·710	6·418	6·145	10
11	10·37	9·787	9·253	8·760	8·306	7·887	7·499	7·139	6·805	6·495	11
12	11·26	10·58	9·954	9·385	8·863	8·384	7·943	7·536	7·161	6·814	12
13	12·13	11·35	10·63	9·986	9·394	8·853	8·358	7·904	7·487	7·103	13
14	13·00	12·11	11·30	10·56	9·899	9·295	8·745	8·244	7·786	7·367	14
15	13·87	12·85	11·94	11·12	10·38	9·712	9·108	8·559	8·061	7·606	15

	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	1
2	1·713	1·690	1·668	1·647	1·626	1·605	1·585	1·566	1·547	1·528	2
3	2·444	2·402	2·361	2·322	2·283	2·246	2·210	2·174	2·140	2·106	3
4	3·102	3·037	2·974	2·914	2·855	2·798	2·743	2·690	2·639	2·589	4
5	3·696	3·605	3·517	3·433	3·352	3·274	3·199	3·127	3·058	2·991	5
6	4·231	4·111	3·998	3·889	3·784	3·685	3·589	3·498	3·410	3·326	6
7	4·712	4·564	4·423	4·288	4·160	4·039	3·922	3·812	3·706	3·605	7
8	5·146	4·968	4·799	4·639	4·487	4·344	4·207	4·078	3·954	3·837	8
9	5·537	5·328	5·132	4·946	4·772	4·607	4·451	4·303	4·163	4·031	9
10	5·889	5·650	5·426	5·216	5·019	4·833	4·659	4·494	4·339	4·192	10
11	6·207	5·938	5·687	5·453	5·234	5·029	4·836	4·656	4·586	4·327	11
12	6·492	6·194	5·918	5·660	5·421	5·197	4·988	4·793	4·611	4·439	12
13	6·750	6·424	6·122	5·842	5·583	5·342	5·118	4·910	4·715	4·533	13
14	6·982	6·628	6·302	6·002	5·724	5·468	5·229	5·008	4·802	4·611	14
15	7·191	6·811	6·462	6·142	5·847	5·575	5·324	5·092	4·876	4·675	15