

UNIVERSITY OF SWAZILAND
DEPARTMENT OF ACCOUNTING
MAIN EXAMINATION PAPER 2007

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

Khabo LTD and Rose LTD are quoted companies. The following figures are from their current balance sheets.

	Khabo LTD E'000	Rose LTD E'000
Ordinary share capital		
Authorised: 2,000,000 shares of 50c	<u>1,000</u>	<u>1,000</u>
Issued: 1,000,000 shares of 50c	500	500
Reserves	<u>1,750</u>	<u>150</u>
Shareholders' funds	2,250	650
6% irredeemable debentures	-	2,500

Both companies earn an annual profit, before charging debenture interest, of E500,000 which is expected to remain constant for the indefinite future. The profits of both companies, before charging debenture interest, are generally regarded as being subject to identical levels of risk. It is the policy of both companies to distribute all available profits as dividends at the end of each year.

The current market value of Khabo LTD's ordinary shares is E3.00 per share cum div. An annual dividend is due to be paid in the very near future.

Rose LTD has just made annual dividend and interest payments both on its ordinary shares and on its debentures. The current market value of the ordinary shares is E1.40 per share and of the debentures E50.00 per cent.

Mr. Binjo owns 50,000 ordinary shares in Rose LTD. He is wondering whether he could increase his annual income, without incurring any extra risk, by selling his shares in Rose LTD and buying some of the ordinary shares of Khabo LTD. Mr. Binjo is able to borrow money at an annual compound rate of interest of 12%.

You are required to do the following:

- (a) Estimate the cost of ordinary share capital and the weighed average cost of capital of Khabo LTD and Rose LTD (8 Marks)

- (b) Explain briefly why both the cost of ordinary share capital and weighed average cost of capital of Khabo LTD differ from those of Rose LTD. (6 Marks)
- (c) Prepare calculations to demonstrate to Mr. Binjo how he might improve his position in the way he has suggested, stating clearly any reservations you have about the scheme. (11 Marks)

Total: (25 Marks)

QUESTION 2

The board of directors of Fana LTD are arguing about the company's dividend policy.

Director A is in favour of financing all investments by retained earnings and other internally generated funds. He argues that a high level of retentions will save issue costs, and that declaring dividends always result in a fall in share price when the shares are traded ex div.

Director B believes that the dividend policy depends upon the type of shareholders that the company has, and that dividends should be paid according to shareholders' needs. She presents data to the board relating to studies of dividend policy in the USA six years ago, and a breakdown of the company's current shareholders.

Company Group (10 companies per group)	US dividend research Mean dividend yield %	Average marginal tax rate of shareholders %
1	7.02	16
2	5.18	22
3	4.17	25
4	3.52	33
5	1.26	45

Fana LTD: Analysis of Shareholdings

	Number of Shareholders	Shares held (million)	% of total shares held
Pension Funds	203	38.4	25.1
Insurance Companies	41	7.8	5.1
Unit and investment trusts	53	18.6	12.1
Nominees	490	32.4	21.2
Individuals	<u>44,620</u>	<u>55.9</u>	<u>36.5</u>
	<u>45,407</u>	<u>153.1</u>	<u>100.0</u>

He argues that the company's shareholder 'clientele' must be identified, and dividends fixed according to their marginal tax rates.

Director C agrees that shareholders are important, but points out that many institutional shareholders and private individuals rely on dividends to satisfy their current income requirements, and prefer a known dividend now to an uncertain capital gain in the future.

Director D considers the discussion to be a waste of time. He believes that any one dividend policy is as good as any other, and that dividend policy has no effect on the company's share price. In support of his case he cites the equation by Modigliani and Miller.

$$nP_0 = \frac{1}{1+p} [(n+m)P_1 - 1 + X]$$

Where

- P₀ = market price at time 0
- P₁ = market price at time 1
- n = number of shares at time 0
- m = number of new shares sold at time 1
- p = capitalisation rate for the company
- 1 = total new investments during period 1
- X = total profit of the company during period 1

Required:

Critically discuss the arguments of each of the four directors using both the information provided and other evidence on the effect of dividend policy on share price that you consider to be relevant.

Total (25 Marks)

QUESTION 3

Mndeni LTD has recently received an offer from the managers of one of its fully-owned subsidiaries for a management buyout of that subsidiary.

The accounts of the subsidiary for the year just ended are as follows.

PROFIT AND LOSS ACCOUNT

	E'000		E'000
Purchases (stock adjusted)	4,000	Sales	10,000
Wages	3,000		
Depreciation	1,000		
Other expenses	1,500		
Net profit	<u>500</u>		
	<u>10,000</u>		<u>10,000</u>

BALANCE SHEET

	E'000		E'000
Land and buildings	2,000	Ordinary shares of E1	1,000
Plant and machinery		Retained profits	<u>7,000</u>
Cost	6,000	Bank overdraft	8,000
Depreciation	<u>3,000</u>		2,000
	<u>3,000</u>		
	5,000		
Stock	2,000		
Debtors	3,000		
	<u>5,000</u>		
	<u>10,000</u>		<u>10,000</u>

The managers have carried out a feasibility study from which they have learned the following:

- (i) The subsidiary is buying its materials from the parent company and is paying a price 25% higher than that at which the materials could be bought from a competitor. Stockholdings are also too high and could be reduced by one-quarter. Furthermore,

the parent company requires payment on delivery, whereas the competitor would give three months credit.

- (ii) The figure for other expenses includes a head office charge of E500,000, which would not be payable if the subsidiary were acquired.
- (iii) 20% of the sales are to the parent company which takes six months credit. All sales are made evenly throughout the year and the credit period given to other customers is three months.
- (iv) The land and buildings could be sold for E6m, the plant and machinery has a scrap value of E1m, the stock is worth E1m and the debtors would be likely to pay in full.
- (v) If E2m were to be spent on advertising immediately, sales would rise to E12m for the foreseeable future. Material and wages usage would rise proportionately and other expenses would increase by E200,000.
- (vi) The plant and machinery will not require replacement for the foreseeable future.
- (vii) A return on capital of 30% would be required for an investment of this sort.

Required:

- (a) Write a report which
 - (i) explains the highest price which the management team should be prepared to pay for the subsidiary and (18 Marks)
 - (ii) suggests a possible funding package for financing the acquisition. (7 Marks)

Ignore taxation and state clearly any assumptions which you make.

Total: (25 Marks)

QUESTION 4

Zipho LTD is a large, all equity-financed multinational company with a current annual cost of capital of 15%. Its directors are contemplating the establishment of a subsidiary company in Flitz, a European country whose currency is nett (symbol N). Zipho LTD has previously exported its products to Flitz, but these exports have become less competitive in price because of rising Swaziland costs and the increased strength of lilangeni relative to the nett.

The government of Flitz is anxious to encourage foreign investment for a five-year period and thus allows overseas investors to repatriate an annual cash dividend equal to that year's after-tax accounting profit. The cash amount equal to the depreciation charged in arriving at the after tax accounting profit can be invested in Flitz government bonds at an annual gross interest rate of 15%. These funds can then be repatriated at the end of the five years, when the operating assets of the Flitz subsidiary must be sold to local investors at a price equal to their net book value. Depreciation is to be calculated on a straight line basis, assuming a zero scrap value and a five year life. Corporate accounting profits (after depreciation and the interest on government bonds) are taxed at the rate of 40%, and the tax is payable immediately after the accounting year end. There is a full double-taxation treaty between Flitz and Swaziland. Zipho LTD pays company tax in Swaziland at 35%.

Details relating to the project are as follows:

- (i) Plant and equipment will cost N20 million payable immediately
- (ii) Sales revenue and exchange rates are expected to be:

Year	Revenue (N million)	Exchange Rate N/E
0	-	2.5
1	18	2.6
2	20	2.7
3	24	2.8
4	30	2.9
5	36	3.0

NB: Assume that Lilangeni is more powerful than the Nett.

- (iii) Variable costs are expected to be 40% of sales revenue. Fixed costs (excluding depreciation) are expected to be N4.0 million in the first year of operations rising by the general rate of inflation in Flitz of 8% per annum.

- (iv) Working capital will be financed locally and its effects can be ignored for the purpose of the investment appraisal.
- (v) Within Flitz projects of this type would be expected to achieve a minimum internal rate of return of 25%.

Required:

- (a) Calculate the present value of:
 - (i) the project in local currency (to the nearest N 0.1 million) for its first five years of operations, and
 - (ii) the proposed investment to Zipho LTD (to the nearest E 0.1 million).
(19 Marks)
- (b) comment on the result of your analysis in (a) above and discuss whether Zipho LTD should proceed with the proposed investment.
(6 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