

University of Swaziland
Department of Accounting
Main Exam Paper

Degree/Diploma and Year of Study : B.Com IV
Title of Paper : Business Finance I.
Course Code : AC 403
Time Allowed : **3 Hours.**

- Instructions:
- 1. The total number of questions on this paper are five (5).**
 - 2. Section A is compulsory and answer any two questions from Section B.**
 - 3. The marks awarded for a question / part are indicated at the end of each question / part of question.**
 - 4. Where applicable, submit all workings and calculations on the answer sheet alongside the case.**
 - 5. Calculations are to be made to two decimal places of accuracy unless otherwise instructed.**

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 requirement : Calculator and P V tables

This paper is not to be opened until permission has been granted by the invigilator.

SECTION A
ANSWER BOTH THE QUESTIONS

QUESTION 1:

- a) i) Assume yourself as a portfolio manager working in a bank in Swaziland and with the help of the following details find out the securities that are over priced and under priced in terms of the Security Market Line (SML). The relevant results for the aggregate market are that the return on 3-month Swazi Govt. Treasury Bill is 9% and the return on Swaziland Stock Exchange (SSX) All-share index is 13%.

(12 marks)

Security	Estimated return	Beta (β)
A	.33	1.7
B	.13	1.4
C	.26	1.1
D	.12	.95
E	.21	1.05
F	.14	.70

- ii) Based upon your calculation which is the best security and why? *(1 mark)*

- b) Spa Holdings bonds have 10 years running to maturity. Interest is paid annually, the bonds have a E 1,000 par value, and the coupon rate of interest is 8%. The bonds have an YTM (yield to maturity) of 9 percent. What is the current market price of the bonds? *(6 marks)*

- c) The Heymann Corporation's bonds have 4 years remaining to maturity. Interest is paid annually; the bonds have a E 1,000 par value; and the coupon rate of interest is 9 percent.

- i) what is the yield to maturity at a current market price of E 1,104?

*(6 marks)****Total (25 marks)***

QUESTION 2:

- a) What is an agency problem? *(3 marks)*
- b) Give some examples of potential agency problems between shareholders and managers. *(3 marks)*
- c) What steps can be taken to motivate managers to act in the shareholder's interest. *(19 marks)*

Total (25 marks)

SECTION B

ANSWER ANY TWO QUESTIONS

QUESTION 3:

Khuba Traders, Matsapha, currently makes all sales on credit and offers no cash discount on sales. Now, the firm is considering its credit terms by offering a 2 percent discount for payment within 10 days, to speed up its collections. The easing of credit terms are expected to increase sales from 200,000 units to 225,000 units and its ACP to fall to 45 days. However, due to increased sales, additional working capital required will be E100,000 (It does not take into account the effect on receivables).

Khuba Traders' selling price is E30 per unit, variable cost per unit is E20 and average cost per unit is E25 at the current sales volume and the firm's current ACP is 60 days. Assuming that 50 percent of the total sales will be on cash discount and 20 percent is the required return on funds invested in receivables, should Khuba Traders change its credit terms by giving discount?

Total (25 marks)

QUESTION 4:

SCL Limited, Swaziland, a highly profitable company, is engaged in the manufacture of power intensive products. As part of its diversification plans, the company proposes to put up a Windmill to generate electricity. The details of the scheme are as follows:

1. Cost of the Windmill E 30 million
2. Cost of Land E 1.5 million

3. Subsidy from the Government to be received at the end of first year of installation E1.5 million.
4. Cost of electricity will be E 2.25 per unit in year 1. This will increase by E 0.25 per unit every year till year 7. After that it will increase by E 0.50 per unit.
5. Maintenance cost will be E 0.4 million in year 1 and the same will increase by E 0.2 million every year.
6. Estimated life 10 years.
7. Cost of capital 15%
8. Residual value of Windmill will be nil. However land value will go to E 6 million, at the end of year 10.
9. Depreciation will be 100% of the cost of the Windmill in year 1 and the same will be allowed for tax purposes.
10. As Windmills are expected to work based on wind velocity, the efficiency is expected to be an average 30%. Gross electricity generated at this level will be 2.5 million units per annum. 4% of this electricity generated will be committed free to the State Electricity Board as per the agreement.
11. Tax rate 50%.

Required :

- i) Calculate the net present value. [Ignore tax on capital profits]. *(23 marks)*
- ii) List down two non-financial factors that should be considered before taking a decision. *(2 marks)*

For your calculations use the following discount factors:

Year	1	2	3	4	5	6	7	8	9	10
Discount Factors	0.87	0.76	0.66	0.57	0.50	0.43	0.38	0.33	0.28	0.25

QUESTION 5:

a) The Shabangu Limited is trying to determine the effect of its inventory turnover ratio and days sales outstanding on its cash-flow cycle. Shabangu's 2000 sales (all on credit) were E 150,000, and it earned a net profit of 6 percent, or E 9,000. It turned over its inventories 6 times during the year, and its Days sales outstanding was 36 days. The firm had fixed assets totalling E 40,000. Shabangu's payables deferral period is 40 days. Assume 360 days per year.

Required:

- i) Calculate Shabangu Limited's Cash conversion cycle? *(2 marks)*
- ii) Assuming Shabangu Limited holds negligible amounts of cash and marketable securities, calculate its Total asset turnover and Return on assets. *(4 marks)*
- iii) Suppose Shabangu's managers believe that the inventory turnover can be raised to 8 times. What would Shabangu's Cash conversion cycle, Total asset turnover and Return on assets have been if the inventory turnover had been 8 for the year 2000? *(3 marks)*

b) Economic Enterprises require 90,000 units of a certain item annually. The cost per unit is E 3, the cost per purchase order E300 and the inventory carrying cost E 6 per unit per year.

Required:

- i) What is the Economic Order Quantity *(5 marks)*
- ii) What should the firm do if the supplier offers discounts as below, viz.,

(11 marks)

Order quantity	Discount
4500 -5999	2 percent
6000 and above	3 percent

(Total 25 marks)

End of question paper

