

University of Swaziland
Department of Accounting
Supplementary 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. Total number of questions on this paper are four (4).
 2. Answer all questions.
 3. The marks awarded for a question / part is 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, Graph Paper and P V tables**

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

QUESTION 1:

- a) The Salem Company issued 20 year, 12% coupon rate bonds with a face value of E 1,000 callable 10 years after the issue date at a call premium of 9%. Due to slump in the economy, one year after issuance the going interest rate had fallen, causing the price of the bonds to rise to E 1,495. What is its yield to call (YTC)?
(8 marks)
- b) Grape Vine Inc. is currently paying a dividend of E1 per share. The company expects to be able to increase its dividends by a constant growth rate of 5% in future. What is the value of each share in the company, if required rate of return of shareholders is 11% per year? What will be the expected value of each share three years from now?
(5 marks)
- c) i) Using CAPM, calculate the required rate of return on a security for which:
risk-free rate is 9%
expected return on the market is 15%
and the beta value is 1.3.
ii) Give the reasoning to justify the consideration of only systematic risk in estimating the expected return on a security.
(5 marks)
- d) The following are the summary statistics of two companies.

	Expected Return	Standard Deviation
Brooklyn Inc.	15%	9%
Mark Company	18%	10%

Which company is more risky? Why?

(2 marks)

Total (20 marks)

QUESTION 2:

- a) Identify and discuss three different ways capital is transferred between savers and borrowers in financial systems. Draw supportive diagrams.
(10 marks)
- b) Discuss in detail the role of financial intermediaries and the economic functions they perform. Also provide suitable examples from the financial system existing in Swaziland where available.
(15 marks)

Total (25 marks)

QUESTION 3:

- a) The Ganges Pump Company uses about 75,000 valves per year and the usage is fairly constant at 6,250 per month.

The valve costs E1.50 per unit when bought in quantities and the carrying cost is estimated to be 20 per cent of average inventory investment on an annual basis. The cost to place an order and process the delivery is E18. It takes 45 days to receive delivery from the date of order and a safety stock of 3,250 valves is desired.

Required:

- i) The most economical order quantity and frequency of orders
- ii) The reorder point
- iii) The most economic order quantity if the valves cost E2.50 per unit.

(10 marks)

- b) Levin Corporation is considering two capital structures. The key information is shown in the following table. Assume a 30% tax rate.

Source of Capital	Structure A	Structure B
Long term debt	E100,000 at 16% rate	E200,000 at 17% rate
Common stock	4,000 shares	2,000 shares

Required:

- i) Calculate two EBIT-EPS coordinates for each of the structures by selecting any two EBIT values and finding their associated EPS values. (use EBIT levels of 50,000 and 80,000)
- ii) Plot the two capital structures on a set of EBIT-EPS axes.
- iii) Indicate approximately, over what EBIT range, if any, each structure is preferred?
- iv) Discuss the leverage and risk aspects of each structure.
- v) If the firm is fairly certain that its EBIT will exceed E 75,000, which structure would you recommend? Why?

*(20 marks)**Total (30 marks)*

QUESTION 4:

Omega Ltd is manufacturing an electronic component used by the automotive industry in South Africa. The company needs to invest in equipment and can invest in either Machine A or Machine B. The respective costs, the relevant cash inflows and effective lives are given below. The firm's cost of capital is 15%.

	Machine A	Machine B
C_0	E 550,000	E 358,000
Year (t)	Cash inflows	
1	110,000	154,000
2	132,000	131,000
3	165,000	150,000
4	209,000	40,000
5	250,000	40,000

Required:

- i) Calculate the NPV for each of the Machines. *(6 marks)*
- ii) Calculate the IRR for each of the Machines
(Take a range of 10% and 20%) *(8 marks)*
- iii) Calculate the pay-back period for each of the Machines. *(5 marks)*
- iv) Recommend which Machine is better based on each
of the above three criterion. *(6 marks)*

Total (25 marks)

END OF QUESITON PAPER