

University of Swaziland
Department of Accounting
Main Exam Paper - Semester - I

Programme of Study : Bachelor of Commerce
Year of Study : Year Three / Level Four and Five
Title of Paper : Intermediate Business Finance
Course Code : AC 322/415
Time Allowed : **3 Hours.**

Instructions: **1. Total number of questions on this paper is four (4).**

2. Answer all the 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 : Financial Calculator

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

QUESTION 1:

- a. Phindile Dlamini just received her credit card bill, which has an outstanding balance equal to E4,410. The credit card carries an 18% simple interest rate, which is compounded monthly. If Phindile Dlamini pays E200 a month, how long will it take her to pay off the credit card bill? Assume that the only charge Phindile incurs from month to month is the interest that must be paid on the remaining outstanding balance. **(4 marks)**

- b. Assume that the real risk-free rate is 5 per cent and the maturity risk premium is zero. If the nominal interest rate on one-year bonds is 10 percent, and on comparable-risk two-year bonds, it is 14 percent, what is the one-year interest rate that is expected for Year 2? What inflation rate is expected during Year 2? **(4 marks)**

- c. Consider the following information, and then calculate the required rate of return for the Scientific Investment Fund. The total investment in the fund is E2 million. The market return is 15 percent, and the risk-free rate is 7 percent.

Stock	Investment	Beta
Diamond Bank	E200,000	1.5
Royal Swazi Sugar	300,000	-0.50
Black Coal Mining	500,000	1.25
Ruth Pharma	1,000,000	0.75

(8 marks)

- d. Given the following probability distributions, what are the expected returns for the Security i and for Security j? What is the expected return of the portfolio if E200,000 was invested in Stock i and E300,000 was invested in Stock j?

State	PR	r_i	r_j
1	0.3	-10%	40%
2	0.4	10	-20
3	0.3	30	30

(6 marks)

- e. Following is information for two stocks.

Investment	Expected Return	Standard Deviation
Stock A	12%	9%
Stock B	30	25

Which investment has the greatest relative risk? Why?

(2 marks)

- f. How do you define β in the context of CAPM?

(1 mark)

Total (25 marks)

QUESTION 2:

- a. Vynah Nkambule bought a bond when it was issued by RSS Corporation 14 years ago. The bond, which has a E1000 face value and a coupon rate equal to 10 percent, matures in six years. Interest is paid every six months; the next interest payment is scheduled for six months from today. If the yield on similar risk investments is 14 percent, what is the current market value of the bond? Will you buy the bond at a price of E800? Why?
(5 marks)
- b. Sukati Arnold paid E1000 for a 20-year bond with a coupon rate equal to 8 percent when it was issued on January 2. If Arnold sold the bond at the end of the year in which it was issued for a market price of E1,850 what return would he earn? What portion of this return represents capital gains, and what portion represents the current yield (CY)?
(4 marks)
- c. Garcia Incorporated has a current dividend of E3.00 per share ($D_0 = E3.00$). Analysts expect that the dividend will grow at a rate of 25 percent a year for the next three years, and thereafter it will grow at a constant rate of 10 percent a year. The company's cost of equity capital is estimated to be 15 percent. What is the current stock price of Garcia Inc.?
(7 marks)
- d. Given the following information, calculate the expected capital gains yield for Manzini Lions Inc. $\beta = 0.6$; $r_M = 15\%$; $r_{RF} = 8\%$; $P_0 = E25$; $D_1 = E2$. Assume the stock is in equilibrium and exhibits constant growth.
(4 marks)
- e. Selzer Inc. sells all its merchandise on credit. It has a profit margin of 4 percent, days sales outstanding equal to 60 days, receivables of E150,000, total assets of E 3 million, and a debt ratio of 0.64. What is the firm's return on equity (ROE)?
(10 marks)

Total (30 marks)**QUESTION 3:**

- a. What does it mean to maximize the value of a corporation? How is value measured? What are the three factors that determine value?
- b. If you were the president of a large, publicly owned corporation, would you make decisions to maximize stockholders' welfare or your own personal interests? What actions can be taken by stockholders to ensure that managements' interests and stockholders' interests coincide?

(20 marks)

QUESTION4:

- a. You have recently been hired to improve the performance of Multiplex Corporation which has been experiencing a severe cash shortage. As one part of your analysis, you want to determine the firm's cash conversion cycle. Using the following information, what is your estimate of the firm's current cash conversion cycle?

Current inventory = E 120,000
 Annual sales = E 600,000
 Accounts receivable = E 160,000
 Accounts payable = E 25,000
 Total annual purchases = E 360,000
 Purchases credit terms = net 30 days
 Receivables credit terms = net 50 days

(5 marks)

- b. The Board of Directors of ABC Cements Ltd. Requests you to prepare a statement showing the working capital requirement forecast for a level of activity of 180,000 units of output. The cost structure for the company's product for the above mentioned activity level is detailed below.

	Cost per Unit (E)
Raw materials	20
Direct labour	5
Overheads (including depreciation of E5 per unit)	15
Cost of production	40
Profit	10
Selling price	50

Additional Information:

- Minimum desired cash balance is E20,000
- Raw materials are held in stock on an average, for 2 months
- Works-in-progress (assume 50% completion stage) will approximate to half month's production
- Finished goods remain in warehouse, on an average, for a month
- Suppliers of raw materials extend a month's credit and receivables are provided two months' credit; cash sales are 25% of total sales
- There is a time lag in payment of wages of a month and half-a-month in case of overheads

Required:

- i) Prepare a statement showing working capital needed

(20 marks)

Total (25 marks)

END OF QUESTION PAPER