# University of Swaziland <br> Department of Accounting <br> Main Exam Paper-Semester-I 

| Programme of Study | $:$ | Bachelor of Commerce |
| :--- | :--- | :--- |
| Year of Study | $:$ | Year Three / Level Four |
| Title of Paper | $:$ | Intermediate Business Finance |
| Course Code | $:$ | ACF319/AC322 |
| Time Allowed | $:$ | $\mathbf{3}$ 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. Bizli Incorporated paid a current dividend of E3.00 per shăre. 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 Bizli Inc.?
(7 marks)
b. Cold Boxes Ltd. has 100 bonds outstanding with a face value of E1,000 each. The required rate of return on these bonds is currently 10 percent, and interest is paid semiannually. The bonds mature in 5 years, and their current market value is E 768 per bond. What is the annual coupon interest rate?

## (4 marks)

c. Mkhonta Sugars issued a bond with 10 year maturity, a E1,000 par value, a 10 percent coupon rate, and semi-annual interest payments. Two years after the bond was issued, the going rate of interest on similar-risk bonds fell to 6 percent. Suppose, the market rate stays at this level for the remainder of the bond's life,

## Required:

Compute current yield and capital gains yield and total yield that the bond will generate in the third year (Year 3) of its life.
(7 marks)
d. Phindile plans to deposit E100 in an account at the end of each month for the next five years so that she can take a trip.

## Required:

i) If Phindile's opportunity cost rate is six percent compounded monthly, how much will she have in her account in five years?
ii) How much will be in the account if the deposits are made at the beginning of each month?
(4 marks)
e. Today is January 2, 2017, and investors expect the annual risk-free interest rates in 2017 through 2019 to be:

| Year | One- year rate (r rf$)$ |
| :---: | :---: |
| 2017 | $2.2 \%$ |
| 2018 | 1.8 |
| 2019 | 2.9 |

## Required:

What is the yield to maturity for Treasury bonds that mature at the end of a) 2018 (a twoyear bond) and b) 2019 (a three-year bond)? Assume the bonds have no risks.

## QUESTION 2:

a. Discuss in detail the role of financial intermediaries and the economic functions they perform. Provide suitable examples from the financial system existing in Swaziland where available.
(20 marks)
b. You are trying to determine the appropriate price to pay for a common stock. If you purchase this stock, you plan to hold it for one year. At the end of the year you expect to receive a dividend of E5.50 and to sell the stock for E154. The appropriate rate of return for the stock is 16 percent. What should be the current price of the stock?
(5 marks)
Total ( 25 marks)

## QUESTION 3:

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 underpriced in terms of Security Market Line (SML). The relevant results for the aggregate market are that the return on 3-month Swazi Government Treasury bill is $9 \%$ and the return on Swaziland Stock Exchange (SSX) All-share index is $13 \%$.

| Security | Expected return | Beta ( $\beta$ ) |
| :--- | :---: | :---: |
| Royal Swazi Sugar | 0.33 | 1.7 |
| Blue Diamond | 0.13 | 1.4 |
| Swa Prop | 0.26 | 1.1 |
| Global Bank | 0.12 | 0.95 |
| Vegas Cement | 0.21 | 1.05 |
| Cortana Mining | 0.14 | 0.70 |

(12 marks)
ii) Based upon your calculation state which is the best security and why?
(2 marks)
b. Based on the information given below, which of the investments would be considered best based on its risk and return relationship? Assume all investors are risk-averse and the investments will be held in isolation, not in a portfolio.

|  | Investment |  |  |
| :--- | :---: | :---: | :---: |
| Expected return, $\hat{r}$ | $\underline{D}$ | $\underline{E}$ | $\underline{F}$ |
| Standard deviation, $\sigma$ | $10.0 \%$ | $18.0 \%$ | $18.0 \%$ |
|  | $7.0 \%$ | $12.0 \%$ | $20.0 \%$ |
|  |  |  | (3marks) |

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 $(\boldsymbol{\beta})$ |
| :--- | :---: | :---: |
| Yes Bank | E200,000 | 1.5 |
| Swazi Sugar | 300,000 | -0.50 |
| Black Coal Mining | 500,000 | 1.25 |
| Fair Pharma | $1,000,000$ | 0.75 |

## QUESITON 4:

a. Matsapha Engineering Company is considering its working capital investment for the next year. Estimated fixed assets and current liabilities for the next year are $E$ $26,000,000$ and E $23,400,000$ respectively. Sales and earnings before interest and taxes depend on current asset investment - particularly inventories and receivables. The company is examining the following alternative Working Capital Policies:

| Working <br> Capital Policy | Investment in <br> Current Assets <br> (E) | Estimated Sales <br> (E) | EBIT <br> (E) |
| :--- | :--- | :--- | :--- |
| Conservative | $45,000,000$ | $123,000,000$ | $12,300,000$ |
| Moderate | $39,000,000$ | $115,000,000$ | $11,500,000$ |
| Aggressive | $26,000,000$ | $100,000,000$ | $10,000,000$ |

## Required:

Calculate the following for each policy
i) Rate of return on total assets
(2 marks)
ii) Net working capital position
iii) Current Ratio
iv) Current Assets to Fixed Assets Ratio
v) Discuss the return risk trade-off of the three policies
b. Last year Swazi Tractors had a quick ratio of 1.8, a current ratio of 5.0, an inventory turnover of 7, total current assets of E340,000, and cash and cash equivalents of E43,000. If the cost of goods sold equalled 80 percent of sales, what were Swazi Tractors' annual sales and days sales outstanding (DSO)?

