

# UNIVERSITY OF SWAZILAND

## DEPARTMENT OF ACCOUNTING AND FINANCE

EXAMINATION PAPER NOVEMBER 2016 ACADEMIC YEAR 2016/2017

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<b>PROGRAMME OF STUDY</b>	<b>Bachelor of Commerce</b>
<b>YEAR OF STUDY</b>	<b>Year 4 (Full Time/Part Time)</b>
<b>TITLE OF THE PAPER</b>	<b>Corporate Finance II</b>
<b>COURSE CODE</b>	<b>AC 426 /514</b>
<b>TIME ALLOWED</b>	<b>Three (3) Hours</b>

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### INSTRUCTIONS

1. There are Four (4) questions, ANSWER ALL.
2. Begin the solution to each question on a new page.
3. The marks awarded for a question are indicated at the end of each question.
4. Show your necessary workings.

**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 layout and presentation of your answer.

**THIS PAPER IS NOT TO BE OPENED UNTIL PERMISSION HAS BEEN GRANTED BY THE INVIGILATOR / SUPERVISOR.**

**SPECIAL REQUIREMENT: FINANCIAL CALCULATOR**

## QUESTION ONE

- i. Differentiate between the current yield and the yield to maturity. **(3 marks)**
- ii. Engen Swaziland has issued 20-year E1, 000 face value, 8% annual coupon bonds, with a yield to maturity of 10%. What is the current price of the bond? **(2 marks)**

Five years ago, RSSC Ltd issued twenty-five-year 10% annual coupon bonds with a E1, 000 face value each. Since then, interest rates in general have risen and the yield to maturity on the RSSC bonds is now 12%. Given this information, what is the price today for an RSSC Ltd bond? **(2 marks)**

- iii. Ten years ago Mnandi Chicken issued twenty-five-year 8% annual coupon bonds with a E1, 000 face value each. Since then, interest rates in general have risen and the yield to maturity on the Mnandi Chicken bonds is now 9%. Given this information, what is the price today for a Mnandi Chicken bond? **(2 marks)**
- iv. Uniswa Supermarket has issued 30-year semiannual coupon bonds with a face value of E1, 000. If the annual coupon rate is 14% and the current yield to maturity is 8%, what is the firm's current price per bond? **(2 marks)**
- v. Shoprite just issued zero-coupon bonds with a par value of E1, 000. If the bond has a maturity of 15 years and a yield to maturity of 10%, what is the current price of the bond if it is priced in the conventional manner? **(2 marks)**
- vi. Woolworths wishes to issue new bonds but is uncertain how the market would set the yield to maturity. The bonds would be 20-year, 7% annual coupon bonds with a E1, 000 par value. Woolworths has determined that these bonds would sell for E1, 050 each. What is the yield to maturity for these bonds? **(3 marks)**
- vii. PnP has outstanding E1, 000 face value 8% coupon bonds that make semiannual payments, and have 14 years remaining to maturity. If the current price for these bonds is E1, 118.74, what is the annualized yield to maturity? **(3 marks)**
- viii. Khukanya Construction has outstanding E1, 000 face value 8% coupon bonds that make semiannual payments, and have 14 years remaining to maturity. If the current price for these bonds is E987.24, what is the annualized yield to maturity? **(3 marks)**
- ix. Saverite Supermarket has E1, 000 par value, twenty-year, 6% annual coupon bonds, outstanding currently selling for E696.25. What is the yield to maturity on these bonds? **(1 mark)**
- x. The Swaziland Treasury bill is currently selling at a discount basis of 4.25%. The par value of the bill is E100, 000, and will mature in ninety days. What is the price of this Treasury bill? **(2 marks)**
- (Total marks: 25)**

## QUESTION TWO

- i) Define risk. (2 Marks)
- ii) Give an example of a risk-free investment and explain why you claim it has no risk. (4 Marks)
- iii) Give an example of a risky investment and explain why the investment is risky. (4 Marks)
- iv) Siphesihle bought a share of stock for E31.50 that paid a dividend of E0.85 and sold six months later for E27.65. What was his profit or loss and holding period return? (3 marks)
- v) Sicebile bought a share of stock for E64.50 that paid a dividend of E0.50 and sold nine months later for E64.00. What was her profit or loss and holding period return? (2 marks)
- vi) Stocks A, B, C, and D have returns of 5%, 15%, 30%, and 110%, respectively. What is their standard deviation? (5 marks)
- vii) Mvuyo estimates that there are three possible return outcomes for a stock he is considering for purchase. He thinks that there is a 45% chance the economy will boom and his stock will return 25%, a 50% chance the economy will continue at its current pace and the stock will return 8%, and finally, that there is a 5% chance that the economy will falter and the expected return on his stock will be -10%. Given these probabilities and conditional expected returns, what is Mvuyo's expected return on the stock he is considering for purchase? (5 marks)

**Total 25 Marks**

## QUESTION THREE

- a) VW Woods Company a subsidiary of an international company operating in Swaziland has expected earnings before interest and taxes of E25 million. It has an unlevered cost of capital of 12%, and debt with both a book and face value of E75 million. The debt has an annual 9% percent coupon. The tax rate is 35 percent.

### Required

- i. Calculate the value of the unleveraged firm? (4 marks)
- ii. Calculate the value of the leveraged firm? (4 marks)
- iii. Calculate the value of equity? (2 marks)
- iv. What is the effect of financial leverage on both Earnings Per Share (EPS) and Return On Equity (ROE). (5 marks)
- b) What does Modigliani and Miller's 1958 theorem imply about a firm's optimal capital structure? Your answer should address:
- i. The Modigliani and Miller models of capital structure without corporate income taxes. (5 marks)

- ii. The Modigliani and Miller models of capital structure with corporate income taxes, including how the introduction of corporate taxes affects the firm's choice of financing. (5 marks)

(Total 25 Marks)

#### QUESTION FOUR

Tibiyo Takangwane paid a dividend of E1.22 five years ago and we are told that in their recently published financial statements they have shown EBIT of E5 million. Since Tibiyo was admitted to the Development Approval Order by the SRA, which basically allows them to pay tax of 10%, and given that they are still servicing a debt of E3million they got from Swazi bank eight years ago at a rate of 7% in interest, they have decided not to change their dividend retention at 40%. Assuming that their stock is currently trading at E500/share and that the Swaziland Stock Exchange is highly efficient according to the EMH, and that they have 257,400 shares outstanding, Estimate Tibiyo's cost of equity

Total 25 marks

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