

UNIVERSITY OF SWAZILAND
DEPARTMENT OF ACCOUNTING AND FINANCE
MAIN EXAMINATION PAPER DECEMBER 2017

PROGRAMME : Bachelor of Commerce
YEAR OF STUDY : Year 4 (Full Time/Part Time)
TITLE OF PAPER : CORPORATE FINANCE II
COURSE CODE : AC426/ AC514 (M) DECEMBER 2017

TOTAL MARKS : 100 MARKS

TIME ALLOWED : THREE (3) HOURS

- INSTRUCTIONS
- 1 This paper consists of 4 numbered pages, including this page and Appendix A which contains useful formulae.
 2. There are **five (5)** 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 all the necessary workings.
 - 5 Round off all prices to the nearest cent, values to the nearest rand and decimalized interest rates to four decimal places, and decimalized weightings to four decimals.

Note: You are reminded that in assessing your work, account will be taken of accuracy of the language and general quality of expression, together with layout and presentation of your answer.

THIS PAPER MUST NOT BE OPENED UNTIL PERMISSION HAS BEEN GRANTED BY THE INVIGILATOR OR SUPERVISOR.

SPECIAL REQUIREMENTS: FINANCIAL CALCULATOR

Question 1 [20 marks: 36 minutes]

Amandla Electrical Limited (AEL) wishes to take advantage of the current power outages by manufacturing low cost generators. The board has approved that this expansion be financed by new issues of equity through a rights offer.

The new capital will be raised via a rights offering, with the following proposed terms:

1. The subscription price (of E20 per share) will be 80% of the current market price.
2. Shareholders will be entitled to purchase **one** new share for every **five** shares currently held.

Below is an extract of the company's most recent Balance Sheet:

Equity and Liabilities

Shareholders' equity (par value E10/share)	75 000 000
Redeemable debentures (par value E1 000/bond)	<u>50 000 000</u>
	<u>125 000 000</u>

Required:

- (a) Calculate the number of existing shares and the new shares to be issued in the rights offer.
[4 marks: 8 minutes]
- (b) Calculate the current price per share of Amandla and the amount the firm can raise under the terms set by the board.
[4 marks: 8 minutes]
- (c) Calculate the value of a right and the ex-rights price of Amandla
[4 marks: 8 minutes]
- (d) Calculate the market value of Amandla's equity after the rights offer.
[2 marks: 2 minutes]
- (e) Calculate the value of a 10% shareholder's investment in Amandla before and after the rights offering if he decides to sell his rights.
[6 marks: 10 minutes]

Note: Round off all prices to the nearest cent, values to the nearest rand, interest factors and decimalized interest rates to four decimal places, and decimalized weightings to four decimals.

Question 2 [25 marks: 45 minutes]

With the aid of fully labeled diagrams, show similarities and differences (compare and contrast) between Modigliani and Miller (M & M) Proposition II with and without taxes.

Question 3 [25 marks: 45 minutes]

Total Power Limited is a listed company that specializes in the manufacturing of electrical gadgets. The company has two million shares outstanding with a par value of E10 per share but are currently trading at E11.97. The company's dividends per share over the past five years (listed from least recent to most recent) were E0.40; E0.30; E0.36; E0.45 and E0.55.

Six and half years ago, Total Power Limited issued twenty thousand 10-year 10% semi-annual coupon bonds with a par value of E1000 each. The bonds have a Yield to Maturity of 10%.

The corporate tax rate is 30%.

Required:

- (a) Explain what a firm's cost of capital represents. [2 marks: 3 minutes]
- (b) Calculate the firm's cost of equity. [9 marks: 16 minutes]
- (c) Identify any two disadvantages with the approach used in calculating (b) above. [2 marks: 3 minutes]
- (d) Calculate the Weighted Average Cost of Capital for Total Power Limited. [12 marks: 23 minutes]

Question 4

State and explain real world factors favouring low and high dividend payouts. [20 marks: 36 minutes]

Question 5

You are the manager of a large wheat farming operation which is looking forward to a bumper harvest. After evaluating the various advantages and drawbacks to forwards and options, you decide to enter into an option contract.

- (a) Name the type of option contract you would use and explain your choice. (2 marks: 2 minutes)
- (b) If a single option has an underlying of 100 bushels of wheat, the strike price is E25.50 per bushel, the premium is E1.75 and you expect that prices are going to fall to E23.00; calculate your net outcome from having this option. (6 marks: 5 minutes)
- (c) If the price ends up being E27.00, describe the action you will take. (2 marks: 2 minutes)

APPENDIX A

- $R_E = \frac{D_0 (1+g)}{P_0} + g$
- $R_P = \frac{D}{P_0}$
- $R_E = R_F + \beta_E \times (R_M - R_F)$
- Bond value = $C \times \frac{1 - 1/(1+r)^t}{r} + F / (1+r)^t$
- $WACC = \left(\frac{E}{V} \times R_E \right) + \left(\frac{P}{V} \times R_P \right) + \left(\frac{D}{V} \times R_D \times (1-T_c) \right)$
- Value of a right = $\frac{\text{Cum-rights share price} - \text{subscription price of new shares}}{N+1}$
- Ex-rights = $\frac{1}{N+1} \times [N \times \text{Cum rights share price}] + \text{subscription price of new shares}$
- Number of new shares = $\frac{\text{Funds to be raised}}{\text{Subscription price}}$
- Number of rights needed to buy a share = $\frac{\text{Old Shares}}{\text{New Shares}}$
- $V_L = \frac{PBIT (1-T_c)}{R_U} + \frac{T_c R_D D}{R_D}$
- $V_U = \frac{PBIT (1-T_c)}{R_U}$
- $R_E = R_U + (R_U - R_D) D / E(1-T_c)$
- $YTM = \frac{i + (F_d - V_d)/n}{(F_d + 2V_d)/3}$