

UNIVERSITY OF ESWATINI
DEPARTMENT OF ACCOUNTING AND FINANCE
MAIN EXAMINATION PAPER

PROGRAMME : Bachelor of Commerce

YEAR OF STUDY : Year 4 (Full Time/Part Time)

TITLE OF PAPER : CORPORATE FINANCE II

COURSE CODE : ACF417/ AC426 (M)

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 **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 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.

Question 1**[25 marks]****Part A (16 marks)**

Mark Holdings (Ltd), a chemical manufacturing firm listed on the Eswatini Stock Exchange (ESE), is considering undertaking a massive expansion project that will cost E117 000 000. The Directors have agreed that this money will be raised by way of a rights offer, and the expenses associated with this rights offer will be 2.5% of the amount to be raised. The company has 16 000 000 outstanding ordinary shares and each share is currently trading at R18.50 on the ESE. The company has authorised their merchant bank to announce that the subscription price of the rights offer is R15.00 per share.

Friday 5th of February 2021 has been set as the last day to register (LDR) to participate in this rights offer.

Required:

- (a) Calculate the number of new shares the company should issue to be able to undertake the project. **(2 marks)**
- (b) Calculate the number of rights to be associated with each new share. **(2 marks)**
- (c) Calculate the value of a right. **(3 marks)**
- (d) Calculate the ex-rights price. **(2 marks)**

Round off all rand values to the nearest cent.

Part B (16 marks)

(This part is related to part A)

Mr. Robert Nxumalo currently owns 400 000 ordinary shares in Mark Holdings. He is interested in participating in the rights offer but has only R750 000 cash available. He has requested your advice on the various options available to him.

- (a) If Mr. Nxumalo were to use his R750 000 to buy new shares and sell the remaining rights:
 - (i) Calculate the number of new shares he would be able to buy, and the equivalent number of rights he would be exercising in the process;
 - (ii) Calculate the amount he could realise from selling the remaining rights;
 - (iii) Calculate the resultant total value of his investment at the close of the rights offer. **(9 marks)**
- (b) If Mr. Nxumalo were to sell all his rights, calculate how much he would realise from the sale of his rights, and inform him of the resultant total value of his investment at the close of the rights offer. **(4 marks)**
- (c) Assuming that a family friend offers to lend Mr. Nxumalo a further R750 000 in order to buy shares in the rights offer, calculate the resultant total market value of Mr. Nxumalo's investment in Mark Holdings. **(3 marks)**

Question 2 (25 marks)

ABC Investments, a toy manufacturing firm, has twenty million shares in issue with a current market price of R10 per share. Since its incorporation 16 years ago, the company has been paying out all its earnings as dividends after meeting all its fixed obligations and taxes. The Board of Directors has agreed to change the dividend policy to promote company growth, and has set the new payout ratio at 40%. Under the new payout ratio, the company expects to pay a dividend of R1.00 per share in the next financial year. The Return on Equity (ROE) of the company is 25%.

The company has fifty thousand 5% coupon bonds which are trading at 95% of par and have one year to maturity.

The company's preferred stock is made up of one hundred thousand 10% irredeemable preference shares. The preference shares have a par value of R1000 per share and are currently trading at R1 600.

The risk-free rate is 15%, and the expected return on the market is 20%. ABC Investments has a beta of 1.975 and the corporate tax rate is 35%.

The firm is considering penetrating the regional market with special toys for underprivileged children below the age of six. The expansion project will require an initial capital outlay of R20 million and is expected to generate annual after-tax cash flows of R4 500 000. Demand for such toys is expected to cease after 10 years. Flotation costs with regard to the issue of new debt, ordinary shares and preference shares will cost 4%, 8% and 6% respectively.

Required:

- (a) Calculate the cost of equity of ABC Investments using:
- (i) The dividend growth model (3 marks)
 - (ii) The Security Market Line (2 marks)
- (b) Calculate the cost of their preference shares. (3 marks)
- (c) Assume that the current capital structure of the company is optimum, and calculate the Weighted Average Cost of Capital (WACC) of ABC Investments using the cost of equity obtained in (a) (i). (8 marks)
- (e) Calculate the amount of capital that must be raised to cover both the cost of the new project and the flotation costs. (4 marks)
- (f) Use the NPV decision rule to determine whether the expansion will be worthwhile for ABC Investments. (5 marks)

Note: Round off all whole interest rates to two decimal places, weightings to four decimal places and values to the nearest cent.

Question 3

Your boss has asked you to value two firms, Xulu and Khaya, which have identical operating profits of R2 500 000. Xulu is an all-equity financed firm, and Khaya is a levered firm with five thousand 10% irredeemable bonds. The unlevered cost of equity is 15%. The tax rate is 40%.

Required:

- (a) With the aid of a fully-labeled diagram and calculations, show that the value of Khaya is greater than that of Xulu. (14 marks)
- (b) Determine the value of Khaya's equity. (5 marks)
- (c) List any six Modigliani and Miller assumptions. (5 marks)

Question 4

State and explain real world factors favouring low and high dividend payouts.

(25 marks)

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 = $\frac{\text{Old Shares}}{\text{New Shares}}$
- $V_L = \frac{PBIT (1-T_c)}{R_U} + \frac{T_c R_D D}{R_D}$
- $V_U = \frac{PBIT (1-T_c)}{R_U}$
- $R_E = R_U + (R_U - R_D) D / E(1-T_c)$
- $YTM = \frac{i+(F_d-V_d)/n}{(F_d+2V_d)/3}$