

UNIVERSITY OF ESWATINI
DEPARTMENT OF ACCOUNTING AND FINANCE
MAIN EXAMINATION PAPER NOVEMBER 2019
ACADEMIC YEAR 2019/2020

PROGRAMME OF STUDY	:	Bachelor of Commerce
YEAR OF STUDY	:	Year 4 (Full Time/Part Time)
TITLE OF THE PAPER	:	Corporate Finance II
COURSE CODE	:	ACF 417/AC 426/ AC514
TOTAL MARKS	:	100 Marks
TIME ALLOWED	:	Three (3) Hours

INSTRUCTIONS

1. There are **FIVE (5)** questions of 25 marks each, **ANSWER ANY FOUR (4) QUESTIONS.**
2. This paper consists of seven (7) numbered pages, including this page and Appendix 1 which contains useful formulae.
3. Begin the solution to each question on a new page.
4. The marks awarded for a question are indicated at the end of each question.
5. Show your necessary workings.
6. Round off all prices to the nearest cent, values to the nearest lilangeni, interest factors 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 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.

QUESTION ONE

(25 Marks)

Bilben Limited is an American firm planning to market environmentally friendly energy products. To finance this lucrative venture, the firm proposes to make a rights issue at E15.00 of one new share for every three shares held. The company currently has outstanding 150 000 shares priced at E50.00 a share. Assuming that the deal goes through and new money is invested to earn a fair return, answer the following questions.

Required:

- 1.1 Define the term 'rights issue' and state **ANY TWO (2)** advantages of rights issue as a way of raising capital for Bilben Limited. (6 Marks)
 - 1.2 Calculate the number of new shares. (3 Marks)
 - 1.3 Calculate the amount of new investment. (3 Marks)
 - 1.4 Calculate the total value of the company after issue. (3 Marks)
 - 1.5 Calculate the total number of shares after issue. (3 Marks)
 - 1.6 Calculate the Stock price after issue. (3 Marks)
 - 1.7 Differentiate between convertible and callable bonds. (4 Marks)
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QUESTION TWO

(25 Marks)

The directors of Senshe Holdings Limited have appointed you as their financial consultant. They require you to calculate the cost of capital of the company.

The following information is available on the capital structure of the company.

1 500 000 ordinary shares with a market price of E3.00 per share. The latest dividend declared was 90 cents per share. A dividend growth of 13% was maintained for the past 5 years and this is expected to continue indefinitely.

1 000 000 12%, E1.00 preference shares, with a market value of E2.00 per share.

E1 000 000 9%, in debentures with a face value E100.00 and current quote of E110.00, due in 7 years. The current yield to maturity is 10%.

Additional Information

- i. The company has a tax rate of 30%.
- ii. The beta of the company is 1.6, a risk free rate of 7% and the return on the market is 15%.

Required:

2.1 Calculate the cost of equity, using the Capital Asset Pricing Model. (2 Marks)

2.2 Calculate the Weighted Average Cost of Capital. (13 Marks)

Use the Gordon Growth Model to calculate the cost of equity.

2.3 Assuming that you work for Senshe Holdings Limited which is a large, diversified company. Last year, approximately 30% of profits came from auto parts, 30% came from electronics, and 40% came from financial services.

Your boss asks you to evaluate a proposed growth opportunity in financial services. You estimate the firm's cost of capital is 11%. Is this the appropriate discount rate to use for the proposed investment? Argue your case. (4 Marks)

2.4 Briefly explain **ANY THREE (3)** uses of the Capital Asset Pricing Model. (6 Marks)

QUESTION THREE

(25 Marks)

Disney Corporation is a small company looking at two possible capital structures. Currently, the firm is an all-equity firm with E1 200 000 in assets and 200 000 shares outstanding. The market value of each share is E6.00. The CEO of Disney is thinking of leveraging the firm by selling E600 000 of debt financing and retiring 100 000 shares, leaving 100 000 shares outstanding.

The cost of debt is 5% annually, and the current corporate tax rate for Disney is 30%. The CEO believes that Disney will earn E100 000 per year before interest and taxes.

Required:

3.1 Calculate the (earnings per share) EPS under the two financing structures with an (earnings before interest and tax) EBIT of E100 000 and recommend which option the CEO should choose. (6 Marks)

3.2 If EBIT is E500 000, which plan will result in higher EPS. (6 Marks)
(Show your workings)

3.3 Calculate the break-even EBIT. (8 Marks)

3.4 Explain what you understand by the pecking order hypothesis and highlight its implication to the determination of funding for companies. (5 Marks)

QUESTION FOUR**(25 Marks)**

- 4.1 Dynamite Limited has been growing at the phenomenal rate of 30 percent per year because of its rapid expansion and explosive sales. You believe this growth rate will last for three more years and then drop to 10 percent per year. The growth rate then remains at 10 percent indefinitely. Total dividends just paid for the past year were E5 million, and the required return is 20 percent. There are 20 million shares in issue. What is the value per share? (15 Marks)
- 4.2 Discuss **ANY FIVE (5)** factors that influence dividend policy of a firm. (10 Marks)
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QUESTION FIVE**(25 Marks)**

- 5.1 In each of the following cases only one answer is correct. Write down numbers 5.1.1 to 5.1.10 in your answer booklet and next to each number write the letter that represents the correct answer. e.g. 5.1.11 E. Each question carries 2 Marks. (20 Marks)

- 5.1.1 The return shareholders require on their investment in a firm is called the:
- A. dividend yield.
 - B. cost of equity.
 - C. capital gains yield.
 - D. cost of capital.
 - E. income return.
- 5.1.2 The pre-tax cost of debt for a firm:
- A. is based on the yield to maturity on the firm's outstanding bonds.
 - B. is equal to the coupon rate for the latest bond issue.
 - C. is equivalent to the current yield on the outstanding bonds of the firm.
 - D. is based on the yield to maturity that existed when the currently outstanding bonds were originally issued.
 - E. has to be estimated as it cannot be directly observed in the market.
- 5.1.3 David Whitehead Industries is expected to pay an annual dividend of E1.30 a share next month. The market price of the stock is E24.80 and the growth rate is 3 percent. What is the firm's cost of equity?
- A. 7.58 percent
 - B. 7.91 percent
 - C. 8.24 percent
 - D. 8.40 percent
 - E. 8.76 percent

- 5.1.4 The Seasing Company has 1,500 bonds outstanding that are selling for E1,060 each. The company also has 5,000 shares of preferred stock at a market price of E32 each. The common stock is priced at E26 a share and there are 36,000 shares outstanding. What is the weight of the common stock as it relates to the firm's weighted average cost of capital?
- A. 6 percent
 - B. 35 percent
 - C. 41 percent
 - D. 54 percent
 - E. 60 percent
- 5.1.5 The proposition that the value of a firm is independent of the firm's capital structure is called:
- A. the capital asset pricing model.
 - B. M&M Proposition I.
 - C. M&M Proposition II.
 - D. the law of one price.
 - E. the efficient markets hypothesis.
- 5.1.6 The M&M Company is financed by E4 million (market value) in debt and E6 million (market value) in equity. The cost of debt is 5% and the cost of equity is 10%. Calculate the weighted average cost of capital. (Assume no taxes.)
- A. 10 percent
 - B. 15 percent
 - C. 8 percent
 - D. 7 percent
 - E. 12.5%
- 5.1.7 Modigliani and Miller's Proposition I states that:
- A. the market value of any firm is independent of its capital structure.
 - B. the market value of a firm's debt is independent of its capital structure.
 - C. the market value of a firm's common stock is independent of its capital structure.
 - D. the book value of any firm is independent of its capital structure.
 - E. The book value of a firm's common stock is independent of its capital structure.
- 5.1.8 When a company sells an entire issue of securities to a small group of institutional investors like life insurance companies, pension funds, etc., it is called a (an):
- A. rights offering.
 - B. general offering.
 - C. Private placement.
 - D. Unseasoned issue.
 - E. Initial Public Offering (IPO).

5.1.9 Suppose the beta of Exxon-Mobil is 0.65, the risk-free rate is 4%, and the expected market rate of return is 14%. Calculate the expected rate of return on Exxon-Mobil.

- A. 12.6 percent
- B. 10.5 percent
- C. 13.1 percent
- D. 6.5 percent
- E. 11 percent

5.1.10 Casino Limited expects to pay a dividend of E3 per share at the end of year 1 (D1) and these dividends are expected to grow at a constant rate of 6% per year forever. If the required rate of return on the stock is 18%, what is the current value of the stock today?

- A. E25.00
- B. E50.00
- C. E100.00
- D. E54.00
- E. E20.00

5.2 With the aid of examples where applicable, define the following terms as used in Corporate Finance.

5.2.1 Yield to Maturity (YTM) (3 Marks)

5.2.2 Security Market Line (SML) (2 Marks)

.....**END OF PAPER**.....

APPENDIX 1 - FORMULAE SHEET

- $R_E = \frac{D_0 (1+g)}{P_0} + g$
- $R_p = \frac{D}{P_0}$
- $R_E = R_F + \beta_E \times (R_M - R_F)$
- Bond value = $C \times \frac{1 - 1/(1+r)^t}{r} + F / (1+r)^t$
- $WACC = \left(\frac{E}{V} \times R_E \right) + \left(\frac{P}{V} \times R_p \right) + \left(\frac{D}{V} \times R_D \times (1 - T_c) \right)$
- $V_L = \frac{PBIT}{R_U} \frac{(1 - T_c)}{R_U} + \frac{T_c R_D D}{R_D}$
- $V_U = \frac{PBIT}{R_U} \frac{(1 - T_c)}{R_U}$
- $R_E = R_U + (R_U - R_D) D / E (1 - T_c)$
- $YTM = \frac{i + (F_d - V_d) / n}{(F_d + 2V_d) / 3}$
- $R_E = \frac{D_1}{P_0} + g$
- $g = ROE \times b$
- $r = l + \left[\frac{L - V_B}{L - H} \times (h - l) \right]$
- $P_0 = D_1 / (r - g)$
- $P_t = D_{t+1} / (R - g)$
- $D_n = D_0 \times (1 + g)^n$
- $P_0 = \frac{D}{R_p}$