

UNIVERSITY OF ESWATINI

DEPARTMENT OF ACCOUNTING AND FINANCE

SUPPLEMENTARY EXAMINATION PAPER NOVEMBER 2019

ACADEMIC YEAR 2019/2020

PROGRAMME OF STUDY	:	Bachelor of Commerce
YEAR OF STUDY	:	Year 3 (Full Time/Part Time)
TITLE OF THE PAPER	:	Intermediate Corporate Finance
COURSE CODE	:	ACF 319 / AC 322
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 six (6) 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)

1.1 In each of the following cases only one answer is correct. Write down numbers 1.1.1 to 1.1.10 in your answer booklet and next to each number write the letter that represents the correct answer. e.g. 1.1.11 C. Each question carries 2 Marks.

(20 Marks)

- 1.1.1 _____ addresses the question of what business we should be in over the long run.
- A) Capital budgeting
 - B) Capital structure
 - C) Working capital management
 - D) Accounts receivable management
 - E) None of the above
- 1.1.2 _____ addresses the question of where we raise money to finance our business activities.
- A) Capital budgeting
 - B) Capital structure
 - C) Working capital management
 - D) Accounts receivable management
 - E) None of the above
- 1.1.3 A furniture store has a sofa on sale for E399.00, with the payment due one year from today. The store is willing to discount the price at an annual rate of 5% (cash discount) if you pay today. What is the amount if you pay today?
- A) E380.00
 - B) E399.00
 - C) E419.00
 - D) E394.00
 - E) E300.00
- 1.1.4. An investment promises a payoff of E195.00 two and one-half years from today. At a discount rate of 7.5% per year, what is the present value of this investment?
- A) E162.03
 - B) E162.75
 - C) E169.47
 - D) E165.50
 - E) There is not enough information to answer this question
- 1.1.5 You intend to buy a vacation home in seven years and plan to have saved E50,000.00 for a down payment. How much money would you have to place today into an investment that earns 8% per year to have enough for your desired down payment?
- A) E29,175.00
 - B) E29,100.00
 - C) E37,065.00
 - D) E25,000.00
 - E) E30,000.00

- 1.1.6 Simpson Construction had sales seven years ago of E2,150,000. This year their sales hit E4,600,000. What has been Simpson's average annual rate of growth of sales?
- A) 30.56%
 - B) 11.48%
 - C) E350,000.00 per year
 - D) E450,000.00 per year
 - E) All of the above
- 1.1.7 Average U.S. wages in 1990 were \$28,960, far larger than the average wage in 1930 of \$1,970. What was the average annual increase in wages over this 60-year period?
- A) 3.31%
 - B) 2.45%
 - C) 24.50%
 - D) 4.58%
 - E) None of the above
- 1.1.8 Buying your own home is often mentioned as "the best investment you can make." In 1930, the average home sale price was E3,845. By 1990, that figure had risen to E123,000. What was the average annual rate of change in the price of houses over this time period?
- A) 3.42% per year
 - B) 5.95% per year
 - C) 10.12% per year
 - D) 12.36% per year
 - E) 15% per year
- 1.1.9 Your friend Andile started college at the age of 18 with E63,450 already saved, because 18 years ago when he was born his parents placed money into a special college savings account earning 7.25% per year. How much money did Andile's parents place into his college account?
- A) E18,000.00
 - B) E3,525.00
 - C) E17,262.00
 - D) E5,824.00
 - E) All of the above.
- 1.1.10 You won the state lottery and took the payout as a E1,283,475 lump sum today. Your spouse has decided that you need to invest this money for the next 10 years and can expect it to earn an average annual rate of return of 7.18%. If this comes to pass, how much money will be in the account at the end of the 10 year period?
- A) E8,471,253.00
 - B) E2,567,586.00
 - C) E1,920,388.00
 - D) E1,890,471.00
 - E) E2 500, 000.00
- 1.2 Explain **ANY FIVE (5)** factors that affect the cost of money in an economy. (5 Marks)

QUESTION TWO**(25 Marks)**

- 2.1 Five years ago, ABC 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 ABC bonds is now 12%. Given this information, what is the price today for an ABC Ltd bond? (5 Marks)
- 2.2 Spar Supermarkets has 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 that is priced in the conventional manner? (4 Marks)
- 2.3 Makro Wholesalers has outstanding E1,000 face value, 8% coupon bonds that make semi-annual 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? (4 Marks)
- 2.4 The Eswatini Central Bank 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? (4 Marks)
- 2.5 Mr Ndlovu is considering buying a car for E80, 000. The bank has quoted him interest rate of 12% per annum (compounded monthly). If he wishes to repay the loan over 60 months, how much will his monthly instalment be? (4 Marks)
- 2.6 Differentiate between callable and convertible bonds. (4 Marks)
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QUESTION THREE**(25 Marks)**

- 3.1 Giant Growth Limited is growing fast. Dividends are expected to grow at a rate of 25% for the next three years, and then fall off to a constant 7 percent growth rate thereafter. If the required return is 13% and the company has just paid a E2.80 dividend per share, what is the current share price? (13 Marks)
- 3.2 Amortization schedules are widely used for home mortgages, auto loans, and so forth to determine how much of each payment represents principal repayment and how much represents interest.

Assume Dr Dlamini gets a home mortgage loan from Nedbank for E5,000,000.00 (present value), with an interest rate of 9% and a term of five years, with fixed installment option.

Required:

- 3.2.1 Prepare an amortization schedule for Dr Dlamini. (10 Marks)

3.2.2 Using the amortization schedule in 3.2.1. How much is the total payment and total interest that Dr Dlamini is going to pay? (2 Marks)

QUESTION FOUR (25 Marks)

- 4.1 Explain the difference between systematic and unsystematic risk. (5 Marks)
- 4.2 State and explain **ANY FIVE (5)** types of systematic risk. (10 Marks)
- 4.3 Discuss **ANY FIVE (5)** limitations of the Capital Asset Pricing Model. (10 Marks)
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QUESTION FIVE (25 Marks)

5.1 An investment has the following cash flows:

Year	Cash flow
0	(E60,000.00)
1	E10,000.00
2	E12,000.00
3	E28,000.00
4	E20,000.00
5	E30,000.00

Required:

- 5.1.1 Calculate the Payback Period. (5 Marks)
- 5.1.2 State **ANY FOUR (4)** advantages of the payback period method. (4 Marks)
- 5.1.3 Calculate the Net Present Value (NPV) at 12% cost of capital. (10 Marks)
- 5.1.4 Calculate the Accounting rate of return (ARR) [Assume that there is no depreciation]. (3 Marks)
- 5.1.5 Would you recommend this investment? Give reasons for your answer. (3 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 = $C \times \frac{[1 - 1/(1+r)^t]}{r} + F [1/(1+r)^t]$
- $FV_t = PV \times (1+r)^n$
- $PVA_n = PMT \times \frac{[1 - 1/(1+r)^n]}{r}$
- FV of a lump sum = $PV \times (1+r)^t$
- PV of a lump sum = $FV / (1+r)^t$
- FV of annuity = $C \times \left(\frac{(1+r)^t - 1}{r} \right)$
- PV of annuity = $C \times \left(\frac{1 - \frac{1}{(1+r)^t}}{r} \right)$
- $YTM = \frac{i + (F_d - V_d)/n}{(F_d + 2V_d)/3}$
- $R_E = \frac{D_1}{P_0} + g$
- $g = ROE \times b$
- $r = l + \left[\frac{L - V_B}{L - H} \times (h - l) \right]$
- $P_0 = D_1 / (r - g)$
- $P_t = D_{t+1} / (R - g)$
- $D_n = D_0 \times (1+g)^n$
- $P_0 = \frac{D}{R_p}$