## UNIVERSITY OF SWAZILAND

## DEPARTMENT OF ACCOUNTING AND FINANCE

SUPPLIMENTARY EXAMINATION PAPER MAY 2016 ACADEMIC YEAR 2015/2016

PROGRAMME OF STUDY
YEAR OF STUDY
TITLE OF THE PAPER
COURSE CODE
TIME ALLOWED

Bachelor of Commerce
Year 4 (Full time)/Year 7 (Part Time)
Corporate Finance II
AC 426/AC 514
Three (3) Hours

## INSTRUCTIONS

1. 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 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.
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## QUESTION ONE

a) Identify and explain FIVE corporate uses of derivatives
(10 marks)
b) A speculator has $£ 1,000,000$. Strike price of the call option is $\$ 1.79 / £$, option premium is $0.025 / \mathrm{f}$. On exercise date, the spot price is $\$ 1.76 / £$. Calculate the profit/loss on option and whether to exercise it or not. (5 marks)
c) The June 2013 Mexican peso futures contract has a price of $\$ 0.08845$. You believe the spot price in June will be $\$ 0.09500$.
i. What speculative position would you enter into to attempt to profit from your beliefs?
ii. Calculate your anticipated profits, assuming you take a position in three contracts (where MP500, 000 is the contractual size of one Mexican peso contract)
(Total Marks 20)

## QUESTION TWO

d) Link Park Corporation is comparing two different capital structures, an all-equity plan (Plan I) and a levered plan (Plan II). Under Plan I, Link Park would have 100,000 shares of stock outstanding. Under Plan II, there would be 50,000 shares of stock outstanding and E15 million in debt outstanding. The interest rate on the debt is 10 percent and there are no taxes.
i. If EBIT is $E 2,000,000$, which plan will result in the higher EPS?
ii. If EBIT is E7, 000,000, which plan will result in the higher EPS?
iii. What is the break-even EBIT?
(5 marks)
e) What is the effect of financial leverage on both Earnings Per Share (EPS) and Return On Equity (ROE).
(5 marks)
(Total Marks 20)

## QUESTION THREE

a. Explain the following terms as they relate to Options
i. Call
ii. American Option
iii. Strike
iv. Premium
v. European option
b. You have an opportunity to invest in a call option with the following attributes

- Exercise price
- Term to expiry
- Current share price
- Volatility
- Risk free rate

E5.90
Three months
E6.30
15\%
$1 \% /$ month

Use the binomial pricing Model to value the option clearly showing in your calculations the three steps of the model
( 4 marks for each step and 1 for correct answer) 15 Marks
(Total Marks 20)

## QUESTION FOUR

(i) 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 ( $\mathbf{3}$ marks)
(ii) 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 ( 3 marks)
(iii) Find the variance for a security that has three one-year returns of $-5 \%, 15 \%$, and $20 \%$.
(iv) Stocks A, B, C, and D have returns of $5 \%, 15 \%, 30 \%$, and $110 \%$, respectively. What is their standard deviation?
(4 marks)
(v) You are considering buying a share of stock in a firm that has the following two possible payoffs with the corresponding probability of occurring. The stock has a purchase price of E50.00. You forecast that there is a $40 \%$ chance that the stock will sell for E70.00 at
the end of one year. The alternative expectation is that there is a $60 \%$ chance that the stock will sell for E30.00 at the end of one year. What is the expected percentage return on this stock, and what is the return variance?
(4 marks)
(vi) 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?
(3 marks)
(Total Marks 20)

## Question five

(a) Assume the following data for a stock: Beta $=1.5$; Risk-free rate $=4 \%$; Market rate of return $=12 \%$; and Expected rate of return on the stock $=15 \%$. Then the stock is:
A. overpriced.
B. underpriced.
C. correctly priced.
D. cannot be determined.
(b) Assume the following data for a stock: Beta $=0.5$; Risk-free rate $=4 \%$; Market rate of return $=12 \%$; and Expected rate of return on the stock $=10 \%$. Then the stock is:
A. Overpriced
B. Underpriced
C. Correctly Priced
D. Cannot be determined
(c) The historical returns for the past four years for Stock C and the stock market portfolio are: Stock C: $10 \%, 30 \%, 20 \%, 20 \%$; Market portfolio: $5 \%, 15 \%, 25 \%, 15 \%$. Calculate the beta of Stock C :
A. 0.86
B. 0.50
C. $\quad 1.50$
D. 0.38
(d) An equity issue sold to the firm's existing stockholders is called a:
E. rights offer.
F. general cash offer.
G. private placement.
H. discriminatory-price auction.
(e) If a firm is financed with both debt and equity, the firm's equity is known as:
A. unlevered equity.
B. levered equity.
C. preferred equity.
D. none of the options.
(f) A firm has a debt-to-equity ratio of 1.0. If it had no debt, its cost of equity would be $12 \%$. Its cost of debt is $9 \%$. What is its cost of equity if there are no taxes?
A. $21 \%$
B. $18 \%$
C. $15 \%$
D. $16 \%$
(g) A firm has a debt-to-equity ratio of 0.50 . Its cost of debt is $10 \%$. Its overall cost of capital is $14 \%$. What is its cost of equity if there are no taxes?
A. $13 \%$
B. $16 \%$
C. $15 \%$
D. $18 \%$
(h) The means by which a company is financed refers to the firm's $\qquad$ -.
A) capital budgeting
B) capital structure
C) accounts receivable management
D) working capital management
(i) 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
(j) Managing the firm's short-term financing activities is known as $\qquad$ .
A) capital budgeting
B) capital structure
C) accounts receivable management
D) working capital management

## Total (20 marks)

