

UNIVERSITY OF SWAZILAND
DEPARTMENT OF ACCOUNTING AND FINANCE
SUPPLEMENTARY EXAMINATION QUESTION PAPER

JULY 2014

PROGRAMME OF STUDY : BACHELOR OF COMMERCE
YEAR OF STUDY : LEVEL 6 (IDE)
TITLE OF PAPER : BUSINESS FINANCE II
COURSE CODE : IDE AC 503
TIME ALLOWED : THREE (3) HOURS
TOTAL MARKS : 100
INSTRUCTIONS

- 1. TOTAL NUMBER OF QUESTIONS**
ON THIS PAPER: FIVE (5)
- 2. ANSWER ALL QUESTIONS**
- 3. WHERE APPLICABLE ALL WORKINGS SHOULD BE SHOWN**

NOTE: YOU ARE REMINDED THAT IN ASSESSING YOUR WORK, ACCOUNT WILL BE TAKEN OF ACCURACY, LANGUAGE, THE GENERAL QUALITY OF EXPRESSION, TOGETHER WITH THE LAYOUT AND PRESENTATION OF YOUR FINAL ANSWER.

SPECIAL REQUIREMENT: FINANCIAL CALCULATOR

THIS PAPER IS NOT TO BE OPENED UNTIL PERMISSION HAS BEEN GRANTED BY THE INVIGILATOR.

QUESTION 1

(a) (i) The current indirect exchange rate is 11 emalangeni per dollar. The anticipated annual inflation rate is 5% in the United States and 8% in Swaziland. What is the forward exchange rate? **(2 marks)**

(ii) The current indirect exchange rate is €0.7714/\$. The anticipated annual inflation rate is 2% in the United States and 5% in the Euro zone. What is the forward exchange rate? **(2 marks)**

(iii) The current direct exchange rate is \$1.2963/€. The anticipated annual inflation rate is 2% in the United States and 5% in the Euro zone. What is the forward exchange rate? **(2 marks)**

(b) (i) Queeneth Dlamini manages a firm that faces transaction exposure. Her company manufactures and sells tricycles around the world. She has just completed a large sale of tricycles to a chain of stores in Sweden and received a promised payment of 1,000 kronas per tricycle. She has already sold 3,000 tricycles and is now awaiting payment. The exchange rate today is 7.5 kronas per lilangeni. Over the next ninety days the indirect exchange rate unexpectedly moves from 7.5 to 7.7. What will be her sales receipt in kronas, and what amount of emalangeni will these kronas convert to at the indirect exchange rate? **(3 marks)**

(ii) You are considering a project that will cost \$5,900,000. The current indirect exchange rate is 12 pesos per dollar. The cash inflow in pesos is 100,000,000 in two years, and the discount rate is 10%. During this time, the anticipated annual inflation rate is 6% in the United States and 14% in Mexico. Should you accept this project? **(5 marks)**

(iii) Say that the current direct exchange rate is \$1.5537/£. The cash inflow in pounds is £70,000 in two years and the discount rate is 7%. During this time, the anticipated annual inflation rate is 3% per year in the United States and 5% per year in the United Kingdom. What is the present value (in U.S. dollars) of the £100,000 after conversion from pounds to dollars if you are using current and forward exchange rates? **(3 marks)**

(iv) Your firm has just issued a 10-year E1,000.00 par value, 10% annual coupon bond for a net price of E964.00. What is the yield to maturity? **(3 marks)**

(Question 1 - Total marks : 20)

QUESTION 2

(a) (i) Mount Reindeer Pure Spring Water Inc. is considered a liquid company because of its generous dividend policy. Prior to the firm's ex-dividend date of May 15th, the stock is selling for a price of E23.18 per share. If you purchase the stock prior to May 15th, you will receive a dividend of E1.15. If you waited until May 16th to buy the stock, and there was no other event to change the price of the stock, what would be the stock's expected price? **(2 marks)**

(ii) Surf City Inc. has decided on a 3-for-1 stock split. If the firm currently has 900,000 shares outstanding, how many shares will be outstanding after the stock split? **(2 marks)**

(iii) Tiger Training Inc. has decided on a 4-for-1 REVERSE stock split. If the firm currently has 1,600,000 shares outstanding, how many shares will be outstanding after the stock split? **(2 marks)**

(iv) Nomfundo Sifundza owns 500 shares of Pharmacon Inc. The firm has a quarterly dividend policy of E0.50 per share or the option to reinvest the cash dividends into additional shares of company stock. If the stock is selling for E128.00 per share, how many shares of stock will Nomfundo receive in the next dividend period if she chooses the dividend reinvestment plan? **(2 marks)**

(b) (i) Fuji Inc. is registered as a business in the film-making industry and has a required return on its assets of 12%. It can borrow in the debt market at 6%. If there are no taxes and M&M's proposition II holds, what is the cost of equity if there is 100% equity financing? **(3 marks)**

(ii) Longmont Inc. is in the property management business and has a required return on its assets of 10%. It can borrow in the debt market at 5%. If there are no taxes and M&M's proposition II holds, what is the cost of equity if there is 10% equity financing and 90% debt financing? **(3 marks)**

(iii) Consider the M&M world of corporate taxes. The interest expense is E10 million, the corporate tax rate is 20%, and the discount rate on the tax shield is 10%. What is the gain to leverage or the value added from issuing debt? **(3 marks)**

(iv) Fuji Inc. is registered as a business in the film-making industry. It can borrow in the debt market at 9%. Its cost of equity with 50% debt is 12%. Its corporate tax rate is 30%. If the M&M world of taxes holds, what is the WACC for Fuji with 50% debt financing? **(3 marks)**

(Question 2 - Total marks : 20)

QUESTION 3

(a) (i) Western Equipment Company will issue 30-year, semiannual bonds with an 8.0% coupon rate and a E1,000 par value. Bonds of similar risk and maturity are currently selling to yield 7.0% in the market place. What is the market price of one of the firm's new bonds? **(2 marks)**

(ii) Investment bankers are commonly compensated for their services through a best-effort or a firm-commitment method. Explain how the two compensation methods work. **(4 marks)**

(iii) Skiffertons , an investment banking firm has proposed two types of payment plans for the IPO being considered by Dakota Drilling, a manufacturer of oil drilling equipment. The first is a firm commitment of E5,000,000. The second is a best effort in which Skiffertons will receive E4.00 for every share sold up to a maximum of E2,000,000 for the 500,000 shares being offered. How much money will Skiffertons earn under the best efforts method if it is able to sell only 80% of the offering at a price of E30.00 per share? **(2 marks)**

(iv) The Bull Bows (BB) investment banking firm has proposed two types of payment plans for the IPO being considered by Johnson JerryRig, a manufacturer of oil drilling equipment. The first is a firm commitment of E10,000,000. The second is a best effort in which BB will receive E3.00 for every share sold up to a maximum of E1,200,000 for the 400,000 shares being offered. How much money will BB earn under the best efforts method if it is able to sell only 90% of the offering at a price of E30.00 per share? (2 marks)

(v) The Bull Bows (BB) investment banking firm has proposed two types of payment plans for the IPO being considered by Johnson JerryRig, a manufacturer of oil drilling equipment. The first is a firm commitment of E10,000,000. The second is a best effort in which BB will receive E3.00 for every share sold up to a maximum of E1,200,000 for the 400,000 shares being offered. How much money will BB earn under the firm commitment method if it is able to sell only 90% of the offering at a price of E30.00 per share? (2 marks)

(vi) Your firm has preferred stock outstanding that pays a current dividend of E3.00 per year and has a current price of E39.50. You anticipate that the economy will grow steadily at a rate of 3.00% per year for the foreseeable future. What is the market required rate of return on your firm's preferred stock? (2 marks)

(vii) Use the security market line to determine the required rate of return for the following firm's stock. The firm has a beta of 0.80, the required return in the market place is 12.50%, and the risk-free rate of return is 3.50% (2 marks)

(viii) Use the dividend growth model to determine the required rate of return for equity. Your firm has just paid a dividend of E1.50 per share, has a recent price of E31.82 per share, and anticipates a growth rate in dividends of 4.00% per year for the foreseeable future. (2 marks)

(Question 3 - Total marks : 18)

QUESTION 4

(a) Innocent has been assigned the task of determining the cost of capital for his division of the firm. His first step is to determine the cost of debt. The firm has E1,000 par value bonds outstanding that have an annual coupon rate of 8.00% and make semiannual payments. These bonds have twenty-three years remaining to maturity and currently sell for E1,133.42. What is the yield-to-maturity on these bonds? (2 marks)

(b) Nomfundo Enterprises Inc. needs to determine its cost of equity capital. Use the following information to estimate the firm's cost of equity using both the security market line and the dividend growth model. The current market price of stock is E22.89, the risk-free rate is 4.00%, the required return on the market portfolio is 13.50%, the firm has a constant growth rate in dividends of 3.00% per year, current dividends are E2.00, and the firm's beta is 0.90. (3 marks)

(c) Elway Electronics has debt with a market value of E350,000, preferred stock with a market value of E150,000, and common stock with a market value of E450,000. If debt has a cost of 8%, preferred stock a cost of 10%, common stock a cost of 12%, and the firm has a tax rate of 30%, what is the WACC? (3 marks)

(d) The following market information was gathered for the Blender Corporation. The firm has 1,000 bonds outstanding, each selling for E1,100.00 with a required rate of return of 8.00%. Blender has 5,000 shares of preferred stock outstanding, selling for E40.00 per share and 50,000 shares of common stock outstanding, selling for E18.00 per share. If the preferred stock has a required rate of return of 11.00% and the common stock requires a 14.00% return, and the firm has a corporate tax rate of 30%, then calculate the firm's WACC adjusted for taxes. (3 marks)

(e) Randy's Ranch House Café has an adjusted WACC of 10.08%. The company has a capital structure consisting of 70% equity and 30% debt, a cost of equity of 12.00%, a before-tax cost of debt of 8.00%, and a tax rate of 30%. Randy is considering expanding by building a new Café in a distant city and considers the project to be riskier than his current operation. He estimates his existing beta to be 1.0, the required return on the market portfolio to be 12.00%, the risk-free rate to be 3.00%, and the beta for the new project to be 1.40. Given this information, and assuming the cost of debt will not change if Randy undertakes the new project, what adjusted WACC should be used in his decision-making? (3 marks)

(f) Richard works for a firm that is expanding into a completely new line of business. He has been asked to determine an appropriate WACC for an average-risk project in the expansion division. Richard finds two publicly traded stand-alone firms that produce the same products as his new division. The average of the two firms' betas is 1.25. Further, he determines that the expected return on the market portfolio is 13.00% and the risk-free rate of return is 4.00%. Richard's firm finances 50% of its projects with equity and 50% with debt, and has a before-tax cost of debt of 9% and a corporate tax rate of 30%. What is the WACC for the new line of business? (3 marks)

(g) (i) What is globalisation? (2 marks)

(ii) Briefly discuss five drivers of globalisation. (5 marks)

(Question 4 - Total marks : 24)

QUESTION 5

(a) Name and describe two key observations that we can make about the capital budgeting decision. (3 marks)

(b) Sabelo, Inc. is considering a four-year project that has an initial after-tax outlay or after-tax cost of E80,000. The future cash inflows from its project are E40,000, E40,000, E30,000 and E30,000 for years 1, 2, 3 and 4, respectively. Sabelo uses the net present value method and has a discount rate of 12%. Will Sabelo accept the project? (5 marks)

(c) Sibongile, Inc. is considering a project that has an initial after-tax outlay or after-tax cost of E220,000. The respective future cash inflows from its four-year project for years 1 through 4 are: E50,000, E60,000, E70,000 and E80,000. Sibongile uses the net present value method and has a discount rate of 11%. Will Sibongile accept the project? **(5 marks)**

(d) Sibusiso, Inc. is considering a five-year project that has an initial after-tax outlay or after-tax cost of E80,000. The respective future cash inflows from its project for years 1, 2, 3, 4 and 5 are: E15,000, E25,000, E35,000, E45,000 and E55,000. Sibusiso uses the net present value method and has a discount rate of 9%. Will Sibusiso accept the project? **(5 marks)**

(Question 5 - Total marks : 18)

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