UNIVERSITY OF SWAZILAND

DEPARTMENT OF ACCOUNTING AND FINANCE

SUPPLIMENTARY EXAMINATION PAPER MAY 2016 ACADEMIC YEAR 2015/2016

PROGRAMME OF STUDY	**Bachelor of Commerce**
YEAR OF STUDY	**Year 4 (Full Time)**
TITLE OF THE PAPER	**Advanced Business Finance**
COURSE CODE	**AC 428**
TIME ALLOWED	**Three (3) Hours**

INSTRUCTIONS

1. 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 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.

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

QUESTION ONE

a) 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? **(10 Marks)**

b) A U.S. firm performs analysis for a project with the following cash flows in euros

Initial Cost	Year 1	Year 2	Year 3
- €2,000,000	€900,000	€850,000	€800,000

Assume risk-free rate in Europe is 5%, U.S. risk free rate is 3% and the spot exchange rate is $0.95/€. The company estimates that cost of capital for this project is 10% (5% risk premium)

Evaluate this project and advise the company directors whether they should take up the project using

i. The Home currency Approach **6 Marks**
ii. The Foreign Currency Approach **9 Marks**

Total 25 Marks

QUESTION TWO

STAC Investments needs to upgrade its mainframe systems. A suitable one costs E240, 000. The systems can be purchased or leased. The terms of the purchase and lease agreements are as follows

Lease

The lease would require annual end-of-year payments of E78, 400 over four years. Maintenance costs of E 8,000 per annum will be paid by the lease. The lessee will also purchase the assets for E26, 000 at the end of the lease

Purchase

The cost will be financed through FNB bank. It would require a four year 16% loan with end of year payments for the four years

STAC will pay insurance and maintenance costs of E10, 000 per annum. At the end of the period the equipment will be sold at its scrap value of E20, 000. Straight line depreciation method is used.

Additional information

- STAC is in the 30% tax bracket
- The before tax cost of debt is 10%

Required

1. Determine the after tax cash outflows and the present value of each cash outflow under both alternatives **20 Marks**
2. Which alternative would you recommend and why? **5 Marks**

Total 25 Marks

QUESTION THREE

The following data on a merger is given:

	Firm A	Firm B	Firm AB
Price per share	$100	$10	
Total earnings	$500	$300	
Shares outstanding	100	40	
Total value	$10,000	$400	$11,000

Firm A has proposed to acquire Firm B at a price of $20 per share for Firm B's stock.

Calculate

a) The gain from the merger. **(5 Marks)**
b) The NPV of the merger. **(5 Marks)**
c) What will be the post-merger price per share for Firm A's stock if Firm A pays in cash? **(5 Marks)**
d) Calculate the post-merger P/E ratio assuming cash is used in the acquisition. **(5 Marks)**
e) What will earnings per share be for Firm A after the merger assuming that cash is used in the acquisition? **(5 Marks)**

Total 25 Marks

QUESTION FOUR

A. Anglo Gold is concerned about short-term volatility in its revenues. Gold currently sells for $1,600 an ounce, but the price is extremely volatile and could fall as low as $1,520 or rise as high as $1,680 in the next month. Anglo Gold will bring 1,000 ounces to the market next month.

   i. What will be total revenues if Anglo Gold remains unhedged for gold prices of $1,520, $1,600 and $1,680 an ounce? **3 Marks**

   ii. The futures price of gold for delivery one month ahead is $1,610. What will be Anglo Gold's total revenues at each gold price if it enters into a one-month futures contract to deliver 1,000 ounces of gold?

   3 Marks

   iii. What will total revenues be if Anglo Gold buys a one-month put option to sell gold for $1,600an ounce? The put option costs $110 per ounce. **3 Marks**

B. A US exporter company wants to hedge its £5 million receivable using a currency option. The strike price is $1.80/£ and option premium of $0.02/£. On exercise date, the spot price is $1.85/£. Calculate the profit/loss on option and whether to exercise it or not. **(6 marks)**

C. A UK company is exporting £1 million of goods to a Canadian firm when the spot rate of exchange is C$1.60/£. It invoices the customer in the home currency. The three-month forward rate is C$1.65/£. The Canadian firm is given three months to pay. Three months later

   Scenario 1 : The dollar has strengthened against the pound to C$1.5/£.
   Scenario 2 : Now assume that the dollar has weakened against sterling to C$1.8/£.
   Calculate the exporter's profit/loss under each scenario if it uses a forward contract to hedge its revenue **5 Marks**

D. George Smith has saved up $10,000 for investing purposes. He sees that the CD rate in Japan is 5% for the coming year and only 4% in the United States. He also sees that the current indirect exchange rate is 120 yen per dollar. Looking at the forward rates, George sees that the one-year forward indirect rate is 125. Can he exploit this situation to his gain? Explain. **5 Marks**

(Total Marks 25)

END OF PAPER