



**UNIVERSITY EXAMINATIONS: 2013/2014**

**EXAMINATION FOR THE MASTER OF BUSINESS ADMINISTRATION**

**(MBA) CORPORATE MANAGEMENT**

**FIN 6012 INTERNATIONAL FINANCE (WEEKEND)**

**DATE: APRIL, 2014**

**TIME: 3 HOURS**

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**INSTRUCTIONS: Answer Question One and Any Other Three Questions**

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**QUESTION ONE (31 MARKS)**

- a) The East Africa countries have in the recent past increased the momentum towards establishing a trading block. This is evidenced by the revival of East African community from the year 1996 to the recent times.

**Required:**

- (i) Identify the benefits which are likely to accrue to member countries. (5 Marks)
- (ii) State and explain the challenges the community is likely to face in its attempt to establish a monetary union with special reference to the European Monetary System (EMS) (5 Marks)
- (iii) Explain the milestone achieved so far towards full integration. (5 Marks)
- (iv) Assume you have been consulted by the community to advise on them on how to deal with the challenges in (ii) above. Explain how you will advise the community. (5 Marks)
- (b) The US dollar is quoted against the foreign currency below:  
Spot rate 1\$: 2000-2300 foreign currencies  
3months forward 1\$: 2010-2280 foreign currencies
- (i) Determine the number of dollars required to buy 50,000 foreign currencies at spot and

- three month forward. (2 Marks)
- (ii) Determine the number of dollars one will get from selling 70,000 foreign currencies at spot and three months forward. (2 Marks)
- (iii) Mention the features of globalisation in the emerging business world. (2 Marks)
- (iv) Explain factors which influence a country's balance of payment position. (3 Marks)
- (v) Explain the steps followed in international capital budgeting. (2 Marks)

## QUESTION TWO (23 MARKS)

The governments of many less developed countries have experienced problems in recent years as their debt levels has risen leading to what has been called a “global debt crisis”.

### Required:

- a) Explain briefly why these problems amount to a “crisis. (6 Marks)
- b) Discuss the approaches that have been used to overcome the problems. (8 marks)
- c) Outline the benefits to multinational business enterprises of resolving the current global debt problems. (6 Marks)
- d) Differentiate between spot rate and forward rate as used in foreign exchange (3 Marks)

## QUESTION THREE (23 MARKS)

- a) A Kenyan company has agreed to sell goods to an importer in Zedland at an invoiced price of Z 150,000 (Zed (Z) is the currency of Zedland). Of this amount, Z 60,000 will be payable on shipment, Z 45,000 one month after shipment and Z 45,000 three months after shipment.

The quoted foreign exchange rates (Z per Kshs.) at the date of shipment as follows:

Spot 1.690 - 1.692

One month 1.687 - 1.690

Three months 1.680 - 1.684

The company decides to enter into appropriate forward exchange contracts through a bank in order to hedge these transactions.

### Required:

- i) State the advantages of hedging in this way. (2 Marks)
- ii) Calculate the amount in Kenya Shillings that the Kenyan Company would receive. (3 Marks)
- iii) Comment with hindsight on the wisdom of hedging in this instance, assuming that the

spot rates at the dates of receipt of the two instalments of Z 45,000 were as follows:

First instalment	1.69 - 1.69	
Second instalment	1.700 - 1.704	(3 Marks)

- b) Large companies with significant borrowings or overseas trade often use interest rate swaps and currency swaps.

**Required:**

Explain how interest rate swaps and currency swaps may be used. (12 Marks)

- c) Highlight three synthetic positions in international finance. (3 Marks)

**QUESTION FOUR (23 MARKS)**

Given below is the Option Pricing Model (OPM) derived by Black and Scholes in 1973 for predicting the market price of call options.

$$C = S N(d_1) - X e^{-r_F T} N(d_2)$$

Where  $d_1 = \frac{\ln(S/X) + r_F T + \frac{1}{2}\sigma^2 T}{\sigma\sqrt{T}}$

$$d_2 = d_1 - \sigma\sqrt{T}$$

C = Market price of the option

N(d<sub>1</sub>) and N(d<sub>2</sub>) = the cumulative probabilities for a unit normal variable

S = Underlying stock's price

X = The exercise price

T = Time to maturity in years

σ<sup>2</sup> = The instantaneous variance

r<sub>F</sub> = The risk-free rate

In = Natural logarithm

**Required:**

- a) State and briefly explain the relationship between a call option's price and the following determinants:

- i) The underlying stock's price. (2 Marks)
- ii) The exercise price (2 Marks)
- iii) The time to maturity (2 Marks)
- iv) The risk-free rate. (2 Marks)

- b) The following data relate to call options on two shares, A and B

	Calls	
	A	B
Months to expiration	3	9
Risk-free rate	10%	10%
Standard deviation of stock returns	40%	40%
Exercise price	Sh.55	Sh.55
Stock price	Sh.50	Sh.50

**Required:**

Using the Black-Scholes Option Pricing Model (OPM);

- i) Calculate the price of call option A. (5 Marks)
- ii) Of the two call options, which would you expect to have the higher price? Why? (Do not compute). (2 Marks)
- c) On 1 March 2013, a Kenyan importer purchased goods from the United States of America worth U.S.\$120,000 to be paid for two months later on 30 April 2013. Kenyan shillings futures were available in the money market and could be bought in blocks of Ksh.100,000 and each future contract cost Ksh.1,000. Spot exchange rate on 1 March 2013 was Ksh.86.50 = US\$1. The two-month forward exchange rate on 30 April 2013 was Ksh.89.50 = US\$1 and the exchange rate at which futures were closed out was Ksh.87.50 = US\$1.
- Required:**
- The net loss (gain) of using the futures contract. (5 Marks)
- (d) Mention the advantages of the Net present value as applied in international capital budgeting. (3 Marks)

**QUESTION FIVE (23 MARKS)**

- (a) Discuss the role of financial management in an international setting with particular reference to:
- (i) Currency exchange rates. (4 Marks)
- (ii) Sources of finance (4 Marks)
- (iii) Investing in overseas countries. (4 Marks)

- (b) A Kenyan import-export merchant was contracted on 31 December 2012 to buy 1,500 tonnes of a certain product from a supplier in Uganda at a price of Ush.118, 200 per tonne. Shipment was to be made direct to a customer in Tanzania to whom the merchant had sold the product at TSh.462,000 per tonne. Of the total quantity, 500 tonnes were to be shipped during the month of January 2013 and the balance by the end of the month of February 2013. Payment to the suppliers was to be made immediately on shipment, whilst one month's credit from the date of shipment was allowed to the Tanzanian customer.

The merchant arranged with his bank to cover those transactions in Kenya shillings (Kshs.) on the forward exchange market. The exchange rates at 31 December 2012 were as given below:

	Ush.	TSh.
Spot	22.85 – 23.20	17.14 – 17.18
1 month forward	1.50 – 1.30 discount	2.50 – 1.50 premium
2 months forward	1.65 – 3.85 discount	4.00 – 3.00 premium
3 months forward	3.75 – 7.00 discount	6.50 – 5.50 premium

The exchange commission is Ksh.10 per Ksh.1, 000 (maximum Sh.1, 000,000) on each transaction.

**Required:**

Calculate (to the nearest Ksh.) the profit that the merchant made during the transaction.

(5 Marks)

- (c) Explain the following budgeting techniques as used in international project appraisal
- i) Net present value
  - ii) Internal rate of return
  - iii) Profitability index

(6 Marks)

**QUESTION SIX (23 MARKS)**

- (a) The purpose of long-term foreign exchange management is not to cover a given foreign exchange exposure by dealings on the forward markets, but to minimize and, if possible, eliminate such exposures before they become critical and therefore costly to cover. **(Source: Harvard Business Review – March/April 1977)**

Comment on the above statement and suggest what actions the financial manager should take in both the long and short term in order to reduce risks from foreign currency transactions.

(10 Marks)

- (b) Your company is proposing to erect a new factory in a foreign country at a cost of 20 million local currency units. Return cash flows will amount to 27 million local currency units per annum and will be spread over five years.

What actions would you take to preserve the profitability of this venture in terms of your home currency? (6 Marks)

- (c) Argue the case for and against trade protectionism (7 Marks)