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CITY CAMPUS

MAIN EXAMINATION

MAY – JULY 2014 TRIMESTER

FACULTY OF COMMERCE

DEPARTMENT OF ACCOUNTING AND FINANCE

EVENING PROGRAMME

CFI 413: FINANCIAL RISK MANAGEMENT

Date: JULY 2014	**Duration: 2 Hours**
INSTRUCTIONS: Answer Question ONE and ANY OTHER TWO Questions	

Q1. a) Forward Rate Agreement (FRAs) emerged in the 1980s as a financial derivative. You are required to define an interest rate FRA and indicate how they arise and how they are settled. **(5 marks)**

b) Your company has requested Standard Bank to enter on its behalf a 5V11 FRA for a GBP 10 million in order to hedge interest cost on a six month borrowing from 1 July 2009. Today's data is **1 February 2009** and market details are:

FRA rates	%pa
5V6	5.8
5V11	5.5
6V12	5.4
11V12	5.0

On 1 July 2009 outturn rates (6 months LIBOR)

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1 February 2009	6.00
1 July 2009	5.00
1 October 2009	4.62
31 December 2009	4.14

Your company borrows at LIBOR plus 30 basis point (i.e. 0.30)

Required:

i) Calculate the total cost of borrowing for your company. **(12 marks)**

ii) What is the annualized effective rate of borrowing (simple annualized interest 4 decimal points)? **(3 marks)**

c) What are the objectives of financial risk management? **(7 marks)**

Q2. a) i) Convert 8% nominal rate to quarterly annualized effective rate. **(2 marks)**

ii) Convert 12% nominal rate to semiannual annualized effective rate. (NB: Use sa = 182 days. 4 decimal points on each answer) **(4 marks)**

b) Calculation of the forward – forward rate is crucial to financial risk management. You are given the following market data:
GBP 183 day LIBOR is 4% and 90 day LIBOR is 3.82%.

Required:

Calculate the 93V183 forward rate. **(7 marks)**

c) The June three months euro sterling futures:

i) Is priced at 95.25 on 1/01/2009 and each has a contract size of £500000.
What is a tick?

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What is its value? **(4 marks)**

ii) If 30 contracts were bought on 1/01/2009 and closed out on 15/04/2009 at 95.75 what profit or loss has been made on the position? **(5 marks)**

Q3. In the national budget of year 2010/2011 the then Minister for Finance announced that financial futures exchange would be established in Kenya in 2012 (not yet in place)

Required:

a) Define an interest rate futures contract. **(5 marks)**

b) You company has USD 200 million floating rate borrowing with a 3 month roll-over next due on 1 March 2012. You believe interest rates will rise and wish to hedge interest cost until the next roll over.

Today is 1 January 2012 and 3 month USD forward – forward rate in the money market from 1 March 2012 is 7.9125%. 1 March euro dollar futures contract is priced at 92. On 1 March 2012 (the outturn) for 3 months USD actual rate in the money market is 10% and the 1 March euro dollar futures contract is 89.95.

(NB: an initial margin of USD 2000 per contract is payable to the exchange upfront).

Required:

Prepare (side by side) cash flow statement for the hedge as compared to the NIL hedge and explain why the hedge was not 100% successful. **(15 marks)**

Q4. a) Interest rate risk is of great concern to companies and is often material to the management and performance of a company.

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Required:

List out methods by which a company can analyze and measure interest risk. **(5 marks)**

b) How would transaction risk arise for a company involved in imports and exports? **(5 marks)**

c)

GBP/USD spot	1.7680	1.7690
3 months points	156	151

Your company in the UK has made an export to a customer in the US worth USD 3000000 receivable in three months time. You intend to hedge against currency risk.

Required:

Show the amount receivable under the following:

i) Forward market cover **(4 marks)**

ii) Money market cover **(6 marks)**

END

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