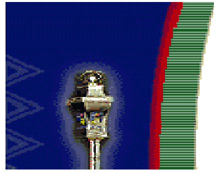

FACULTY OF COMMERCE

DEPARTMENT OF FINANCE

BACHELOR OF COMMERCE HONOURS DEGREE IN FINANCE

PART IV 2nd SEMESTER FINAL EXAMINATION– MAY 2012

INTERNATIONAL FINANCE II [CFI 4202]

TIME ALLOWED: 3 HOURS

INSTRUCTIONS TO CANDIDATES

1. Answer **QUESTION ONE** and any **THREE (3)** other questions.
2. Show all workings.
3. Write neatly and legibly.

INFORMATION TO CANDIDATES

1. The paper contains **FIVE (5)** Questions.
2. Each full question carries a total of **25 marks** and part marks are indicated in brackets at the end of each part question.
3. Candidates may write on the question paper but shall not write in the answer booklet during reading time.
4. The businesses in this question paper are intended to be fictitious.

QUESTION ONE (COMPULSORY)-25 MARKS

MINI CASE: DORCHESTER, LTD.

Dorchester Ltd is an old-line confectioner specializing in high-quality chocolates. Through its facilities in the United Kingdom, Dorchester manufactures candies that it sells throughout Western Europe and North America (United States and Canada). With its current manufacturing facilities, Dorchester has been unable to supply the U.S. market with more than 225,000 pounds of candy per year. This supply has allowed its sales affiliate, located in Boston, to be able to penetrate the U.S. market no farther west than St. Louis and only as far south as Atlanta. Dorchester believes that a separate manufacturing facility located in the United States would allow it to supply the entire U.S. market and Canada (which presently accounts for 65,000 pounds per year). Dorchester currently estimates initial demand in the North American market at 390,000 pounds, with growth at a 5 percent annual rate. A separate manufacturing facility would, obviously, free up the amount currently shipped to the United States and Canada. But Dorchester believes that this is only a short-run problem. They believe the economic development taking place in Eastern Europe will allow it to sell there the full amount presently shipped to North America within a period of five years.

Dorchester presently realizes £3.00 per pound on its North American exports. Once the U.S. manufacturing facility is operating, Dorchester expects that it will be able to initially price its product at $7.70 per pound. This price would represent an operating profit of $4.40 per pound. Both sales price and operating costs are expected to keep track with the U.S. price level; U.S. inflation is forecast at a rate of 3 percent for the next several years. In the U.K., long-run inflation is expected to be in the 4 to 5 percent range, depending on which economic service one follows. The current spot exchange rate is $1.50/£1.00. Dorchester explicitly believes in PPP as the best means to forecast future exchange rates. The manufacturing facility is expected to cost $7,000,000. Dorchester plans to finance this amount by a combination of equity capital and debt. The plant will increase Dorchester's borrowing capacity by £2,000,000, and it plans to borrow only that amount. The local community in which Dorchester has decided to build will provide

$1,500,000 of debt financing for a period of seven years at 7.75 percent. The principal is to be repaid in equal installments over the life of the loan. At this point, Dorchester is uncertain whether to raise the remaining debt it desires through a domestic bond issue or a Eurodollar bond issue. It believes it can borrow pounds sterling at 10.75 percent per annum and dollars at 9.5 percent. Dorchester estimates its all-equity cost of capital to be 15 percent.

The U.S. Internal Revenue Service will allow Dorchester to depreciate the new facility over a seven year period. After that time the confectionery equipment, which accounts for the bulk of the investment, is expected to have substantial market value. Dorchester does not expect to receive any special tax concessions. Further, because the corporate tax rates in the two countries are the same--35 percent in the U.K. and in the United States--transfer pricing strategies are ruled out.

Required

Should Dorchester build the new manufacturing plant in the United States? [25 marks]

Total [25 marks]

QUESTION TWO

a) The following is the balance sheet of ABC Ltd, a wholly-owned Zimbabwean subsidiary of White International Ltd, a UK-based multinational company.

ABC Ltd Balance Sheet as at 31.12.2011

	$(000's)		**$(000's)**
Non-current Assets	20 000	**Shareholders' Funds**	12 000
Debtors	9 000	**Long-term Liabilities**	10 000
Cash	2 000	**Current Liabilities**	9 000
	31 000		**31 000**

Given that the $/£ exchange rate was $1.5/£1 as at 31/12/2010 and $1.25/£1 as at 31/12/2011, calculate:

i. The translation gain/loss for ABC Ltd using the current rate method, current/non-current method, and the monetary/non-monetary method. [3;3;3 marks]

ii. The translation exposure of ABC Ltd using the current rate method, current/non-current method, and the monetary/non-monetary method. [2;2;2 marks]

b) Given the translation exposures in a) (ii) above, explain how ABC Ltd could use a balance sheet hedge to hedge against translation exposure. [2 marks]

c) With the aid of relevant examples, discuss the arguments for and against the hedging of translation exposure. [8 marks]

Total [25 marks]

QUESTION THREE

a) An investor in her home (domestic) country would want to expand her portfolio into one-year bonds in foreign countries. The inflation rate in her domestic country is 3% and the inflation rate in one of the foreign countries is 1%. Inflation rates are totally predictable over the next one year. The exchange rate between the two countries is currently 2 domestic currency units for 1 foreign currency unit. The price level of the typical consumption basket in the domestic country relative to the price level of the typical consumption basket in the foreign country is also 2 to 1. The real exchange rate is 1 to 1. The one-year interest rate is 5% in the domestic country and 3% in the foreign country. The investor expects the real exchange rate to remain constant over time.

i. What are the expected exchange rate and the expected return on the foreign bond in domestic currency? [3;2 marks]

ii. At the end of the year, the inflation rates have indeed been 3% and 1% for the domestic and foreign country respectively, but the exchange rate has been volatile during the year, ending the year at 1.80. What are the real exchange rate and the ex-post return on the foreign bond? [2;2 marks]

iii. How would you qualify the risk-return characteristics of this investment? [2 marks]

b) State and explain any **TWO** strategies for managing economic exposure. [6 marks]

c) Evaluate centralized treasury management as a strategy for optimizing the use of group cash resources for a multinational company. [6 marks]

d) What is a back-to-back loan? [2 marks]

Total [25 marks]

QUESTION FOUR

a) State and explain the fundamental steps in international cash management. [12 marks]

b) You are given the following outstanding receipts and payments for a UK-based MNC and its 4 subsidiaries:

Paying Company ***Receiving Company(£'000)***

	UK Parent	**Subsidiary 1**	**Subsidiary 2**	**Subsidiary 3**	**Subsidiary 4**
UK Parent	-	200	350	110	170
Subsidiary 1	600	-	320	80	80
Subsidiary 2	40	240	-	310	600
Subsidiary 3	-	40	130	-	250
Subsidiary 4	460	300	10	330	-

Demonstrate how payment netting can be used to minimize both costs and risk.

[13 marks]

Total [25 marks]

QUESTION FIVE

a) You are a European investor considering investing in a foreign country. The world market risk premium is estimated at 5%, the foreign currency offers a 1% risk premium and the current risk free rates are 5% in euros and 3% in foreign currency units. In other words you expect the foreign currency to appreciate against the euro by

an amount equal to the interest rate differential (which is also equal to the inflation differential) plus the currency risk premium, or a total of 3%.

Your broker provides you with the following statistics:

	Stock A	Stock B	Stock C	Stock D
World beta	1.0	1.0	1.2	1.4
Currency Exposure(γ)	1.0	0.0	0.5	-0.5

i. According to the International CAPM, what should be the expected returns on the 4 stocks, in euros? [6 marks]

ii. Stocks A and B have the same world beta but different expected returns. Give an intuitive explanation for this difference. [2 marks]

b) Explain, with the aid of relevant examples, how leading and lagging may be used to manage foreign currency transaction exposure. [6 marks]

c) Translation exposure may need to be hedged in cases where it affects the borrowing capacity of the subsidiary. Explain. [2 marks]

d) Evaluate any **THREE** strategies that an MNC may use to unblock funds.[9 marks]

Total [25 marks]

END OF EXAMINATION PAPER