#### ACF419 (M) DECEMBER 2018

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# UNIVERSITY OF ESWATINI DEPARTMENT OF ACCOUNTING MAIN EXAMINATION PAPER DECEMBER 2018

DEGREE/ DIPLOMA AND

YEAR OF STUDY

B. COM IV

:

1

TITLE OF PAPER

RISK MANAGEMENT

COURSE CODE

ACF419 (M) DECEMBER 2018

TOTAL MARKS

100 MARKS

TIME ALLOWED

THREE (3) HOURS

INSTRUCTIONS

- 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 all the necessary workings.
- 5 Round off as you deem appropriate.

Note: You are reminded that in assessing your work, account will be taken of accuracy of the language and 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 INVILATOR OR SUPERVISOR.

SPECIAL REQUIREMENTS:

CALCULATOR

### **QUESTION 1**

Briefly explain each of the following types of risks and also explain how the company can measure each risk. What can the company do to mitigate each type of risk?

- a) Interest rate risk (6 Marks)
- b) Refinancing risk (6 Marks)
- c) Liquidity risk (6 Marks)
- d) Currency risk (6 Marks)
- e) Credit risk (6 Marks)

Total: (30 Marks)

### **QUESTION 2**

- a) Identify three presumptions for well-functioning financial markets? (6 Marks)
- b) What are the major functions of derivative markets in an economy? (12 Marks)
- c) Compare and contract forward contracts and futures contracts? (10 Marks)
- d) If an individual anticipates the price of a stock falling, how would he go about shorting the stock to capture a profit? How does his short position create a liability? (5 Marks)
- e) Define arbitrage and the law of one price? (2 Marks)

Total: (35 Marks)

#### **QUESTION 3**

- a) Consider a call option on an asset with an exercise price of E100, a put option on that same asset with an exercise price of E100, and a forward contract on the asset with an exercise price of E100, all expiring at the same time. Assume that at the expiration, the price of the asset is each of the following two values.
  - Explain what happens from the perspective of the long position for each derivative.
    - i. E105 (6 Marks)
    - ii. E95 (6 Marks)
- b) Briefly explain the difference between an initial margin and a maintenance margin? (4 Marks)
- c) The crude oil futures on the Johannesburg Stock Exchange covers 1,000 barrels of crude oil. The contract is quoted in rands and cents per barrel (e.g., R27.42), and the minimum price change is R0.01. The initial margin requirement is R3, 375, and the maintenance margin requirement is R2,500. Suppose you bought a contract at R27.42, putting up the initial margin. At what price would you get a margin call? (4 Marks)

Total: (20 Marks)

# **QUESTION 4**

- a) On 7 June 2017, an American watch dealer decided to import 100 000 swiss watches. Each watch costs SF225. The dealer would like to hedge against a change in the dollar/ Swiss franc exchange rate. The forward rate was \$0.3881. Determine the outcome from the hedge if it was closed on 16 August 2017, when the spot rate was \$0.4434. (5 Marks)
- On 2 January 2018, an American firm decided to close out its account at a Canadian Bank on 28 February 2018. The firm is expected to have 5 million Canadian dollars in the account at the time of the withdrawal. It would convert the funds to US dollars and transfer them to a New York bank. The relevant spot foreign exchange rate was \$0.7564. The March Canadian dollar futures contract was priced at \$0.7541.

# You are required to:

Determine the outcome of a futures hedge if on 28 February 2018, the spot rate was \$0.7207 and the futures rate was \$0.7220. All prices are in U.S. dollars per Canadian dollar. The Canadian dollar futures contract covers CD100 000. (10 Marks)

Total (15 Marks)