LAIKIPIA UNIVERSITY

UNIVERSITY EXAMINATIONS

1ST SEMESTER 2023/2024 ACADEMIC YEAR

FOURTH YEAR EXAMINATION FOR THE DEGREE OF BACHELOR OF COMMERCE

BCOM 431/BFIN 412: FINANCIAL MANAGEMENT II

STREAM: ***TIME: 2 HRS***

DAY: WEDNESDAY [14.30-16.30 P.M] ***DATE: 13/12/2023***

THIS QUESTION PAPER CONSISTS OF THREE (3) PAGES

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INSTRUCTIONS:

Answer questions one and any other two

QUESTION ONE (Compulsory, 30 Marks)

a) Explain the procedure of constructing a hedge for a future currency payment. **(6 Marks)**
b) Distinguish between American-style and European-style options. **(4 Marks)**
c) Describe the main features of a currency swap in money market hedging. **(8 Marks)**
d) Suppose the risk-free asset's rate of return is 2% and you forecast a return on the market portfolio of 8%. If the beta for some asset x is 1.2, what is the expected return on asset x? **(2 Marks)**

e) Given: Stock price = Shs.23 Exercise price = Shs.18 Risk-free rate = 0.06 Time to expire = 1.0 (1year) Standard deviation of the stock's return
Required:
Using the Black-Scholes Option Pricing Model (OPM) determine the value of this option. **(8 Marks)**
f) Distinguish between Spot markets and the futures markets **(2Marks)**

QUESTION TWO (20 Marks)

Stocks A and B have the following historical returns

Year	Stock A's Returns , r_A	Stock B's Returns, rB
2013	(18%)	(24%)
2014	44	24
2015	(22)	(4)
2016	22	8
2017	34	56

Required:
a) Calculate the average rate of return for each stock during the 5-year period. **(2 Marks)**
b) Assume that someone held a portfolio consisting of 50% of Stock A and 50% of Stock B. Determine the realized rate of return on the portfolio in each year. **(8 Marks)**
c) Calculate the average return on the portfolio during this period. **(3 Marks)**
d) Calculate the standard deviation of returns for each stock and for the portfolio. **(3 Marks)**
e) Looking at the annual returns data on the two stocks, determine the correlation coefficient between returns on the two stocks. **(2 Marks)**
f) If you added more stocks at random to the portfolio, what would happen to σ_p? **(2 Marks)**

QUESTION THREE (20 Marks)

a) You can buy XZ Company stock at Shs.30 a share, or Shs.3, 000 for 100shares. You can acquire a Shs.33 3-month call for Shs.400. Thus,you could invest Shs.2, 600cash and have the opportunity to buy 100 shares at Shs.33 per share. Assume, however, that you decide to invest your Shs.2, 600in a 3-month CD earning 14 percent interest.

Required:

i) Determine the CD return at this level **(2 Marks)**

ii) If the YZ Company stock goes to Shs.16, what will be the value of this option? **(4 Marks)**

iii) If the stock goes to Shs.43, would there be a gain or loss? **(2 Marks)**

b) Explain the various ways of delaying cash disbursements and consequently delaying cash outflow. **(12 Marks)**

QUESTION FOUR

a) It is 15 October and a treasurer has identified the need to convert euros into dollars to pay a US
supplier $12 million on 20 November. The treasurer has decided to use December Euro futur es contracts to hedge with the following details:

- Contract size €200,000.
- Prices given in US$ per Euro (i.e. €1 = …).
- Tick size $0.0001 or $20 per contract.

Position is opened on October 15 and closes it on 20th November. Spot and relevant prices are as follows:

Date	Spot	Futures price
15 October	1.3300	1.3350
20 November	1.3190	1.3240

Required:

a) Calculate the financial position using the hedge described. **(10 Marks)**

b) Financial managers must always devise financial strategies. However, explain what financial managers of the subsidiaries in countries, where currency values are likely to drop should do, **(10 Marks)**