LAIKIPIA UNIVERSITY

UNIVERSITY EXAMINATIONS

2ND SEMESTER 2023/2024 ACADEMIC YEAR

EXAMINATION FOR MASTERS OF BUSINESS ADMINISTRATION

MBAD 733: FINANCE THEORY

STREAM: ***MBA*** ***TIME: 3 HRS***

DAY: THURSDAY [8.30-11.30 A.M] ***DATE: 28/03/2024***

THIS QUESTION PAPER CONSISTS OF FOUR (4) PAGES

PLEASE DO NOT OPEN UNTIL THE INVIGILATOR SAYS SO.

INSTRUCTIONS

- Attempt Question **ONE** and any other **THREE** Questions
- Show you workings and well labelled illustrations where necessary
- Do not write anything on your question paper
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QUESTION ONE (Compulsory 15 Marks)

a) There are key landmarks in development of finance theory providing the development of core ideas in finance founded on a set of logically cogent ideas critical today in the theory of finance. In view of the foregoing statement, explain the key landmark theories of decision making.

b) Consider two investments that have cash flow streams and associated probabilities.

Project A			*Project B*		
Cashflows	***Utiles***	***Prob.***	***Cashflows***	***Utiles***	***Prob.***
Shs -20,000	-0.20	0.10	Shs -25,000	-0.25	0.10
0	0	0.10	0	0	0.20
60,000	0.60	0.60	50,000	0.50	0.50
80,000	0.80	0.50	100,000	1.00	0.20

Required:

i) Determine the expected monetary value for Projects A and B **(2 Marks)**

ii) Using the expected monetary value state the most preferred and accepted Project. **(2 Marks)**

iii) Highlight the key limitations of utility approach **(3 Marks)**

c) Write short notes on the following authors of finance theories emphasising the key areas of finance they have contributed to.

i) Michael C. Jensen and William H. Meckling. **(2 Marks)**

ii) Tobin's q theory. **(2 Marks)**

iii) Fama and French (Three Factor Model). **(2 Marks)**

iv) Kahneman and Tversky (Prospect Theory). **(2 Marks)**

QUESTION TWO (15 Marks)

Consider the situation where the stock price 6 months from the expiration of an option is Shs.42, the exercise price of the option is Shs.40, the risk-free interest rate is 10% p.a. and the volatility is 20% p.a.

Required:

a) Determine the value of this option if the option is a European put. **(10 Marks)**

b) The choice of securities is determined by the individual's desire to obtain some consumption pattern over a period of time (Explain). **(5 Marks)**

QUESTION THREE

FAQ is a profitable, listed manufacturing company, which is considering a project to diversify into the manufacture of computer equipment. This would involve spending Shs.220 million on a new production plant. It is expected that FAQ will continue to be financed by 60% debt and 40% equity. The debt consists of 10% loan notes, redeemable at par after 10 years with a current market value of Shs.90. Any new debt is expected to have the same cost of capital. FAQ pays tax at a rate of 30% and its ordinary shares are currently trading at Shs.4.53. The equity beta of FAQ is estimated to be 1.21. The systematic risk of debt may be assumed to be zero. The risk free rate is 6.75% and market return 12.5%. The estimated equity beta of the main competitor in the same industry as the new proposed plant is 1.4, and the competitor's capital gearing is 35% equity and 65% debt by book values.

Required

a) Calculate the after-tax cost of debt of FAQ's loan notes. **(3 marks)**

b) Calculate a project-specific discount rate for the proposed investment. **(2 marks)**

c) Discuss the problems that may be encountered in applying this discount rate to the proposed investment. **(5 marks)**

d) Explain briefly what is meant by pecking order theory. **(5 marks)**

QUESTION FOUR

Nedwen Co is a UK-based company which has the following expected transactions. One month: Expected receipt of $240,000 One month: Expected payment of $140,000 Three months: Expected receipts of $300,000. The finance manager has collected the following information:

	Per £1
Spot rate:	$1.7820 ± 0.0002
One month forward rate:	$1.7829 ± 0.0003
Three months forward rate:	$1.7846 ± 0.0004

Money market rates for Nedwen Co:

	Borrowing	Deposit
One year sterling interest rate:	4.9%	4.6
One year dollar interest rate:	5.4%	5.1

Assume that it is now 1 April.

Required:

a) Discuss the differences between transaction risk, translation risk and economic risk. **(4 marks)**

b) Explain how inflation rates can be used to forecast exchange rates. **(3 marks)**

c) Calculate the expected sterling receipts in one month and in three months using the forward market. **(2 marks)**

d) Calculate the expected sterling receipts in three months using a money-market hedge and recommend whether a forward market hedge or a money market hedge should be used. **(3 marks)**

e) Discuss how sterling currency futures contracts could be used to hedge the three-month dollar receipt. **(3 marks**

QUESTION FIVE

Futures contracts and options on futures contracts can be used to modify risk.

Required:

a) Identify the fundamental distinction between a futures contract and an option on a futures contract and explain the difference in the manner that futures and options modify portfolio risk. **(10 marks)**

b) Explain the Modigliani and Miller's (MM) dividend irrelevancy proposition **(5 marks)**