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(KNOWLEDGE FOR DEVELOPMENT)

KIBABII UNIVERSITY

UNIVERSITY EXAMINATIONS

2017/2018 ACADEMIC YEAR
THIRD YEAR, SECOND SEMESTER EXAMINATIONS

[SPECIAL/SUPPLIMENTARY EXAMINATION]

FOR THE DEGREE IN BACHELOR OF COMMERCE

COURSE CODE: BCF 336

COURSE TITLE: FINANCIAL RISK MANAGEMENT

DATE: 19/10/2018 **TIME:** 9.00 – 11.00 AM

INSTRUCTIONS TO CANDIDATES

- ANSWER QUESTION ONE AND ANY ANOTHER TWO
- TIME ALLOWED IS TWO (2) HOURS
- DO NOT WRITE ANYTHING ON THE QUESTION PAPER

[PLEASE SHOW YOUR WORKINGS]

SECTION A
QUESTION ONE.

(a) Assume you are a portfolio manager. Based on the following details, determine the securities that are overpriced and underpriced in terms of the **Security Market Line.**

Security	Actual Return	β (Beta)	σ (S.deviation)
A	0.33	1.7	0.50
B	0.13	1.4	0.35
C	0.26	1.1	0.40
D	0.12	0.95	0.24
E	0.21	1.05	0.28
F	0.14	0.70	0.18
Market Index	0.13	1.00	0.20
Treasury Bills	0.09	0	0.0

(8 Marks).

(Please show your workings).

(b) Kenya Airways is a leading carrier in the region.
The Airline has appointed you as its consultant on financial risk management to advise on how best to surmount threats to its profitability on account of financial risk exposure.

Required.

Considering the nature of the Airline's operations, identify and explain at least three specific risks that the airline is exposed to as well as suggesting ways to overcome the same. **(12 Marks).**

(c) Consider two Banks: Kenya Commercial Bank and Stanbic Bank with the following information:

	KCB		STANBIC	
	Bid	Ask	Bid	Ask
Tanzania Shilling Quote	**0.06**	**0.07**	**0.08**	**0.09**

Required.

Compute the gain (if any) from Locational arbitrage for a Kenyan Investor with Kshs 3.8 Million to invest. **(5 Marks).**

(d) Consider a put option with the following characteristics:

1. Exercise Price shs 120
2. Premium per put option Shs. 15
3. Time to expiry for the option – 6 months.

Required.

Calculate the value of the option and profit or loss assuming the following prices of underlying security after six months.
Shs. 90, Shs 98, Shs 105, Shs 120 and Shs 140. **(5 Marks).**

SECTION B (CHOOSE ANY TWO QUESTIONS)

QUESTION TWO.

The returns of two assets, X and Y under four possible states of nature are given below:

State of Nature	Probability	Return on Asset X	Return on Asset Y
1	0.20	12%	16%
2	0.10	20%	15%
3	0.40	30%	25%
4	0.25	-15%	5%
5	0.05	10%	18%

Required.

(a) Calculate the following:

(i) Standard deviation of both assets. - **(6 Marks).**

(ii) The covariance between the returns of asset X and Y. - **(6 Marks).**

(iii)The coefficient of Correlation between the returns of X and Y. **(6 Marks).**

(b) Which of the two assets above would you find safe to invest in? **(2 Marks).**

QUESTION THREE.

(a) Foreign currency risk is real in most multi-national companies.
Describe the various risks that that these companies face on account of Currency fluctuations and possible measures adopted by them to cushion against the effects of these risks. **(12 Marks).**

(b) Suppose ABC Ltd trades in the domestic currency the Kenya Shilling as well as foreign currency, the US Dollar ($).
It enters into a forward currency contract for a six month period.
The Spot exchange rate is Kshs 103 per 1 US dollar ($) and the interest rate in Kenya is 9% while that of United States is 5%.These rates are continuously compounded and assumed to be fixed over the life of the forward contract.

Required.

(i) Calculate the forward price of a six month contract for ABC Ltd. **(3 Marks).**

(ii)Assuming that the interest rate in the United States rises to 12%, what would be the forward price of this six month for ABC Ltd. - **(3 Marks).**

(iii) Which of the two (i) and (ii) presents some arbitrage opportunity? **(2 Marks).**

QUESTION FOUR.

(a) What is the Capital Asset Pricing Model? Briefly explain its assumptions and implications. **(10 Marks).**

(b) Pwani Industries has a beta of 1.30.The risk free rate is 10 percent and the expected return on the market portfolio is 15 percent.
Pwani Industries currently pays a dividend of Shs. 20 a share and this dividend is expected to grow at the rate of 12 percent per annum for the foreseeable future.

Required.

(i) Calculate the stock's expected rate of return according to CAPM. -**(4 Marks)**

(ii) Calculate the Stock's present market price per share, based on the required return in (i) above. **(3 marks).**

(iii)Calculate the required return and market price per share assuming the beta is 0.70 (All other parameters remain the same). **(3 Marks).**

QUESTION FIVE

Write short notes on the following:

(a) Limitations of Forward contracts. - **(5 Marks).**

(b) Advantages of Interest rate swaps. - **(5 Marks).**

(c) Role of hedging to the firm. - **(5 Marks).**

(d) The Capital Market Line - **(5 Marks).**