

UNIVERSITY OF SWAZILAND

DEPARTMENT OF ACCOUNTING AND FINANCE

EXAMINATION PAPER NOVEMBER 2015 ACADEMIC YEAR 2015/2016

PROGRAMME OF STUDY	Bachelor of Commerce
YEAR OF STUDY	Year 3 (Full Time)
TITLE OF THE PAPER	Investment Analysis and Portfolio Management
COURSE CODE	AC 321
TIME ALLOWED	Three (3) Hours

INSTRUCTIONS

1. 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 your necessary workings.

NOTE: You are reminded that in assessing your work, account will be taken of accuracy of the language and the general quality of expression, together with layout and presentation of your answer.

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SPECIAL REQUIREMENT: FINANCIAL CALCULATOR

QUESTION ONE

Briefly explain, (with the aid of an examples where applicable), the following terms as they apply to financial markets.

- a) Initial Public Offering (2 Marks)
 - b) Capital Markets (2 Marks)
 - c) Money Markets (2 Marks)
 - d) Secondary Markets (4 Marks)
 - e) Insider Dealing (5 Marks)
 - f) Short selling (5 Marks)
 - g) Margin Trading (5 Marks)
- (25 Marks)**

QUESTION TWO

- a) Reproduce and fill in the table below for the following zero coupon bonds, all of which have par values of E 1000.

Price (E)	Maturity (years)	Bond-Equivalent yield to maturity
400	20	?
500	20	?
500	10	?
?	10	10%
?	10	8%
400	?	8%

(6 Marks)

- b) Bonds of Kensol Corporation with a par value of E1000 sell for E960, mature in five years and have a 7% annual coupon rate paid semi-annually

Calculate the

- i) Current yield
- ii) YTM to the nearest whole percent e.g. 2%, 3%, 4% etc
- iii) Realised Compound Yield for an investor with a 3 year holding period and a reinvestment rate of 6% over the period. At the end of the three years, the 7% coupon bonds with two years remaining will sell to yield 7% **(6 Marks)**

c) Cite one short-coming of each of the following fixed income yield measures

- i) Current yield
- ii) Yield to Maturity
- iii) Realised Compound Yield

(3 Marks)

d) A Swaziland Government bond with a E100 par value has a fixed coupon rate of 10% per year; coupon interest is payable semi-annually and the maturity date is the end of October 2015. Assume the current date is November 1, 2011. The current market yield (yield to maturity) on similar securities is 8% per year (4% per half-year).

(i) What is the value of this Swaziland Government security?

(3 mark)

(ii) Is the bond trading at a premium or discount?

(2 mark)

(iii) What would be the value of the bond if market interest rates rise to 12%?

(3 mark)

(iv) Is the bond trading at a premium or discount?

(2 mark)

(Total Marks 25)

QUESTION THREE

i. Based on the following scenarios, what is the expected return for the portfolio with the following return profile? **(2.5 Marks)**

	Market Condition		
	Bear	Normal	Bull
Probability	.2	.3	.5
Rate of return	-25%	10%	24%

ii. Use the following information to answer the questions that follow

	Market Condition		
	Bear	Normal	Bull
Probability	.2	.5	.3
Rate of return -X	-20%	18%	50%
Rate of Return -Y	-15%	20%	10%

- a) What are the expected returns of stocks X and Y? **(2.5 Marks)**
- b) What are the standard deviations of returns of stocks X and Y? **(4 Marks)**
- c) Assume that of your E10, 000 portfolio you invest E9, 000 in stock X and E1, 000 in stock Y. What is the expected return on your portfolio? **(4 Marks)**
- iii. A stock has a beta of 1.3, the expected return on the market is 14 percent, and the risk-free rate is 5 percent. What must the expected return on this stock be? **(3 marks)**
- iv. A stock has an expected return of 14 percent, the risk-free rate is 4 percent, and the market risk premium is 6 percent. What must the beta of this stock be? **(3 marks)**
- v. A stock has an expected return of 17 percent, a beta of 1.9, and the expected return on the market is 11 percent. What must be the risk-free rate be **(3 Marks)**
- vi. You own a stock portfolio invested 25 percent in Stock Q, 20 percent in Stock R, 15 percent in Stock S, and 40 percent in Stock T. The betas for these four stocks are .6, 1.70, 1.15 and 1.34, respectively. What is the portfolio beta? **(3marks)**

(Total Marks 25)

QUESTION FOUR

The table below shows abridged income statements for two companies

	Ken	Ben
	E-millions	E-millions
Sales	81	89.1
Less Variable Op. Costs	14.4	54.9
	66.6	34.2
Less Fixed Costs	33.3	6.3
	33.3	27.9
Interest	6.3	0.9
	27	27

Calculate the following for each Company

- i. The Degree of Operating Leverage (5 Marks)
- ii. The Degree of Financial Leverage (5 Marks)
- iii. The Degree of Combined Leverage (5 Marks)
- iv. Explain the relationship between DCL and a firm's taxable profit (5 Marks)
- v. Briefly discuss the cost structures of the two companies (5 Marks)