

UNIVERSITY OF SWAZILAND
DEPARTMENT OF ACCOUNTING
MAIN EXAMINATION PAPER DECEMBER 2017

DEGREE/ DIPLOMA AND

YEAR OF STUDY : B. COM 111/ B.COM LEVEL 5

TITLE OF PAPER : INVESTMENT ANALYSIS AND PORTFOLIO
MANAGEMENT

COURSE CODE : ACF317/ AC321 (M) DECEMBER 2017

TOTAL MARKS : 100 MARKS

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 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

During the past five years, you owned two stocks that had the following rates of return:

<u>Year</u>	<u>Stock A</u>	<u>Stock B</u>
1	0.19	0.08
2	0.08	0.03
3	(0.12)	(0.09)
4	(0.03)	0.02
5	0.15	0.04

- Compute the arithmetic mean annual return of each stock. Which stock is most desirable by this measure? (5 Marks)
- Compute the standard deviation of the annual rate of return for each stock? By this measure, which is the preferable stock? (5 Marks)
- Compute the coefficient of variation for each stock. By this measure relative measure of risk, which stock is preferable? (5 Marks)
- Compute the geometric mean rate of return for each stock. Discuss the difference between the arithmetic mean return and the geometric mean return for each stock. (5 Marks)
- Briefly discuss the five fundamental factors that influence the risk premium of an investment? (10 Marks)

Total (30 Marks)

QUESTION 2

As an investment Manager for Laura Corporation you have been approached by a client who has been reading newspapers on investing and is keen to invest for retirement. Advise the client by writing a brief report on what the portfolio management process entails. (20 Marks)

QUESTION 3

- a) Discuss three factors that cause investors to consider including various global securities in their portfolios? (6 Marks)
- b) Define a futures contract and briefly explain three benefits that are to be attained by individual investors, bond portfolio managers and corporate financial managers by using them. (6)
- c) You are given the following long run annual rates of return for alternative investments instruments:

Swaziland Government T-bills	3.50%	(2 Marks)
Large – cap common stock	11.75	(2 Marks)
Long – term corporate bonds	5.50	(2 Marks)
Small – Capitalization Common stock	13.10	(2 Marks)

The annual rate of inflation during this period was 3%. Compute the real rate of return on these investments.

- d) Discuss why international diversification reduces portfolio risk. Specifically, why would you expect low correlation in the rates of return for domestic and foreign securities? (5 Marks)

Total: (25 Marks)

QUESTION 4

The following are the monthly rates of return for Madison Cookies and for Sophie Electric during a six month period.

Month	Madison Cookies	Sophie Electric
1	(0.04)	0.07
2	0.06	(0.02)
3	(0.07)	(0.10)
4	0.12	0.15
5	(0.02)	(0.06)
6	0.05	0.02

Compute the following:

- a) The mean return for each stock. (2)
- b) Standard deviation of returns for each stock. (4)
- c) Covariance between the rates of return (8)
- d)
 - i. The correlation coefficient between the rates of return. (2)
 - ii. What level of correlation did you expect between the two stocks before you computed the correlation coefficient? (2)
 - iii. Would these two stocks be good choices for diversification? Why or why not? (2)
- e) Marx Dlamini invests 30% of his wealth in a risky asset with an expected rate of return of 15% and a variance of 0.04 and 70% in a Treasury bill that pays a 6%.
 - i) What is the expected return of Marx Dlamini's portfolio on this investment? (3 Marks)
 - ii) What is the standard deviation of this portfolio? (2 Marks)

Total (25 Marks)