## ACF317/ AC321 (M) DECEMBER 2018

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# UNIVERSITY OF ESWATINI DEPARTMENT OF ACCOUNTING MAIN EXAMINATION PAPER DECEMBER 2018

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 2018

TOTAL MARKS

100 MARKS

1

TIME ALLOWED

THREE (3) HOURS

**INSTRUCTIONS** 

There are four (4) questions, answer all.

2 Begin the solution to each question on a new page.

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**

Faith Khumalo is considering the possibility of acquiring an asset. Below are the properties of the two assets possible for acquisition;

Asset X		Asset Y	
Possible Rate of Return	Probability	Possible Rate of Return	Probability
-0.10	0.20	-0.60	0.05
0.00	0.10	-0.30	0.20
0.10	0.25	-0.10	0.10
0.25	0.20	0.20	0.30
0.30	0.15	0.40	0.20
0.40	0.10	0.80	0.15

Faith is a risk-averse investor who will want to invest in a less risky asset. In light of the information on the two assets above:

- a) Calculate the expected return of the two assets and advise Faith on which asset has a desirable return? (6 Marks)
- b) Determine the standard deviations of the two assets and by this measure, which asset should Faith invest in? (8 Marks)
- c) Compute the coefficient of variation of the two assets and by this measure which asset would you advise Faith to invest in? (5 Marks)
- d) What is the expected return on the portfolio if Faith splits her wealth in a 50/50 split between asset X and asset Y? (3 Marks)
- e) Define the term "systematic risk". (3 Marks)

#### **QUESTION 2**

- a) "Young people with little wealth should not invest money in risky assets such as the stock market, because they can't afford to lose what little money they have." Do you agree or disagree with this statement? Why?
- b) Mrs Madlazi, your healthy 63 year old neighbour is about to retire and comes to you for advice. From talking to her, you find out she was planning on taking all the money out of her company's retirement plan and investing it in bond mutual funds and money market funds. What advice would you give her? (5 Marks)
- c) Briefly discuss the importance of a policy statement important? (5 Marks)
- d) Discuss how an individual's investment strategy may change as he or she goes through the consolidation phase of life. (5 Marks)
- e) Your 45 year old uncle, John is 20 years away from retirement; your 35 year old older sister, Elsa is about 30 years away from retirement. How might their investment policy statements differ? (5 Marks)

### **QUESTION 3**

- a) 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)
- b) What are stock warrants and call options? How do they differ? (5 Marks)
- c) The following information is available concerning the historical risk and return relationships in the South African stock market:

No.			Standard
	Arithmetic	Geometric	Deviation
Investment Category	Mean	Mean	of Return <sup>a</sup>
Common stocks	10.28%	8.81%	16.9%
Treasury bills	3.54	3.49	3.2
Long-term government bonds	5.10	4.91	6.4
Long-term corporate bonds	5.95	5.65	9.6
Real estate	9.49	9.44	4.6

<sup>&</sup>lt;sup>a</sup> Based on arithmetic mean.

- i. Explain why the geometric and arithmetic mean returns are not equal and whether one or the other may be more useful for investment decision making. (5 Marks)
- ii. For the time period indicated, rank these investments on a relative basis using the coefficient of variation from most to least desirable. (10 Marks)

**QUESTION 4** 

The following are the monthly rates of return for CLT Agency and Goodies Investment during a six month period.

Month	CLT Agency	<b>Goodies Investment</b>
1	-0.04	0.07
2	0.06	-0.02
3	-0.07	-0.1
4	0.12	0.15
5	-0.02	-0.06
6	0.05	0.02

Given the information above, compute the following;

a) Average monthly rate of return R for each stock	(4 Marks)
b) Standard deviation of returns for each stock	(6 Marks)
c) Covariance between the rates of return	(9 Marks)
d) The correlation coefficient between the rates of return	(2 Marks)

e) What level of correlation did you expect? How did your expectations compare with the computed correlation? Would these two stocks be good choices for diversification? Why or why not?

(4 Marks)