

UNIVERSITY OF ESWATINI
DEPARTMENT OF ACCOUNTING AND FINANCE
MAIN EXAMINATION PAPER DECEMBER 2019

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 2019

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.

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SPECIAL REQUIREMENTS: CALCULATOR

QUESTION 1

Assuming that you are a risk averse investor and you are considering to select an asset from the following two investment options:

| Asset A | | | Asset B | | |
|------------------|--------|-------------|------------------|--------|-------------|
| Market condition | Return | Probability | Market condition | Return | Probability |
| Good | 16% | 0.25 | Good | 20% | 0.25 |
| Average | 12% | 0.50 | Average | 14% | 0.50 |
| Poor | 8% | 0.25 | Poor | 8% | 0.25 |

- Compute the expected return of each stock and indicate the most desirable by this measure. (5 Marks)
- Compute the standard deviation of the annual rate of return for each stock and indicate the preferable stock by this measure. (8 Marks)
- Using the coefficient of variation for each stock, which stock is preferable? (5 Marks)
- Assuming that you have a E100 000 which you split 50/50 between asset A and Asset B, compute the expected return of the portfolio. (3 Marks)
- Distinguish between non-systematic risk and systematic risk. (4 Marks)

Total (25 Marks)

QUESTION 2

- a) Discuss the importance of the policy statement. (18 Marks)
- b) Explain why should Emaswati invest in foreign stocks? (7 Marks)

Total: (25 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) Differentiate between stock warrants and call options. (5 Marks)
- c) The following information is available concerning the historical risk and return relationships in the South African stock market:

| Investment Category | Arithmetic Mean | Geometric Mean | Standard Deviation of Return |
|----------------------------|------------------------|-----------------------|-------------------------------------|
| 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 |

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)

Total: (25 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 | Goodies Investment |
|-------|------------|--------------------|
| 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;

- Average monthly rate of return for each stock. (4 Marks)
- Standard deviation of returns for each stock. (6 Marks)
- Covariance between the rates of return. (9 Marks)
- The correlation coefficient between the rates of return. (2 Marks)
- What sign of the correlation coefficient did you expect? Would these two stocks be good choices for diversification? Why or why not? (4 Marks)

Total: (25 Marks)