UNIVERSITY OF FORT HARE
DEPARTMENT OF ECONOMICS

EAST LONDON CAMPUS

ECF514E

MAIN EXAMINATION MEMORANDUM
JUNE 2023

Time: 3 Hours

Subject: Financial Economics **Marks: 100**

This paper consists of 3 pages including the cover page

Internal Examiners
Mr B. Mgxekwa

External Examiner
Dr SA. Khumalo

Instructions

- **This paper consists of Sections A and B.**
- **Answer all questions in Section A.**
- **Choose ANY FOUR questions in Section B.**
- **Use of a non-programmable calculator is permitted.**

SECTION A: MULTIPLE CHOICE QUESTIONS [20 Marks]

1. A.
2. C
3. A
4. B
5. D
6. C
7. C
8. C
9. A
10. C

SECTION B: ANSWER ANY FOUR QUESTIONS [80 Marks]

Question Two (20)

a) Explain the difference between Type I, Type II, Type III and Type IV liabilities with examples for each. [12]

The above question is based on page 29 of Keith Pilbeam 4th Edition.

b) What is meant by globalisation of financial markets? Refer to South African financial markets for examples and discuss the pros and cons. [8]

The above question is based on page 10 of Keith Pilbeam 4th Edition.

Question Three (20)

a) A market portfolio is made up entirely if the following securities.

	Total value in millions	standard deviation	Correlation metrics				
				A	B	C	D
Security A	80	10%	A	1.0	0	0	0
Security B	60	20%	B	0	1.0	0	0
Security C	70	30%	C	0	0	1.0	0
Security D	100	40%	D	0	0	0	1.0

i) What is the standard deviation for the market portfolio? [6]

ii) If the risk free interest is 4 %, and the expected return on the market portfolio is 10%, draw a diagram to depict the relevant market capital line. [4]

iii) What investment strategy would you advise someone who is looking for a 20% return to use in order to achieve this. What standard deviation can they expect? [10]

This is based on chapter 7, section 7.17 of Keith Pilbeam 4th Edition

Question Four (20)

a) What distinguishes uncertainty from risk? [4]

b) Differentiate between the state preference and the expected utility hypotheses approached to explaining uncertainty and risk. [6]

The above questions are based on chapter 4 of Roy E. Bailey (2005).

c) Outline three types of risk that commercial banks face. [6]

The above question is based on page 44 of Keith Pilbeam 4th Edition.

d) How do the mean and variance help to understand risk? [4]

This is based on chapter 7, section 7.5 of Keith Pilbeam 4th Edition.

Question Five (20)

a) There are three observations about perfectly efficient markets, citing examples, fully discuss these in the context of information efficiency. [20]

This is based on chapter 10, section 10.2 of Keith Pilbeam 4th Edition.

Question Six (20)

a) Over the years, certain data anomalies have been observed that challenges two forms of the efficient market hypothesis. Name and explain the anomalies. [7]

The above question is based on chapter 10 and section 10.6 to 10.21 of Keith Pilbeam 4th Edition.

b) Suppose you have a risky asset that provides you with an expected return of 10% a year with 15% volatility (standard deviation). You also have a risk-free asset that provides you with a 4% risk-free return.

   i) If you have R1m and invest 60% into the risky asset and 40% into the risk-free asset, what is the expected return and risk of your portfolio? [5]

   ii) How much would your portfolio be worth if they realized return on the risky asset is 15%? [4]

   iii) If you are allowed to borrow money at the risk-free rate, how can you get a portfolio with 20% expected return and what is the risk of this portfolio? [4]

The above questions are based on chapter 5 of Roy E. Bailey (2005).