



**National University of
Science and Technology**
Think in Other Terms



**FACULTY OF COMMERCE
DEPARTMENT OF FINANCE
BACHELOR OF COMMERCE HONOURS DEGREE IN FINANCE
PART IV – 2nd SEMESTER SUPPLEMENTARY EXAMINATION - AUGUST 2011
REAL ESTATE INVESTMENT AND FINANCE[CFI 4205]**

INSTRUCTIONS

1. Answer ANY FOUR questions
2. Start the answer to each full question on a fresh page of the answer sheet.
3. Questions may be written in any order, but must be legibly numbered.
4. Write legibly.

INFORMATION FOR CANDIDATES

The businesses in this question paper are intended to be fictitious

The paper contains FIVE(5) questions.

All questions carry equal marks [25 marks]

Question One

- (a) Identify and explain **FOUR** risks of international real estate investment. [16 marks]
(b) Critically evaluate the use of derivatives in real estate risk management. [9 marks]
Total [25 marks]

Question Two

- (a) Outline **THREE** unique characteristics of real estate and demonstrate how they affect real estate returns and risk. [15 marks]
(b) Briefly explain how the use of securitization in real estate markets contributed to the 2007-2009 global financial crisis. [10 marks]
Total [25 marks]

Question Three

- (a) You are given the following information about a prospective property investment:

Gross Potential Rental Income	\$150,000.00	Asking price	\$775,000.00
Vacancy and collection loss rate	10%	Mortgage loan	75% of price
Fixed Expenses	\$5,000.00	Mortgage rate	8% p.a
Variable Expenses	\$5,000.00	Loan term	25 years
Depreciation	\$5,000.00	Marginal tax rate	31%
Number of rooms	8	Required rate of return on property	10%
Number of bathrooms	3	Expected price after 2 years	\$820,000.00
Distance from city	10 miles		

A hedonic regression model gives the following slope coefficients for the property characteristics:

Characteristic	Units	Slope coefficient (\$ per unit)
Number of rooms	Number	100 000
Number of bathrooms	Number	50 000
Distance from city	Miles	(10 000)

Required:

- (i) Calculate the appraised values of the property using the income approach and the sales comparison approach. [8 marks]
- (ii) Calculate the Net Present Value of the property investment and make an investment recommendation. [12 marks]
(NB: Assume an investment horizon of two years and annual mortgage installments, with a prepayment option)
- (b) Explain why mortgage prepayment risk is important to lending institutions. [5 marks]

Total [25 marks]

Question Four

- (a) State and explain **FOUR** factors affecting the income generated from a property investment. [12 marks]
- (b) Identify and evaluate any **THREE** strategies that a real estate investor may adopt to manage international real estate risk. [8 marks]
- (c) Explain how international real estate investment provides greater diversification benefits than international stocks and bonds. [5 marks]

Total [25 marks]

Question Five

- (a) Critically evaluate the **THREE** key risks associated with construction and project finance. [9 marks]
- (b) Discuss the factors affecting the inflation hedging efficiency of real estate. [8 marks]
- (c) A house is bought for \$180,000.00 of which \$45,000.00 is deposit. A mortgage is secured for the house at 18% interest compounded monthly and dischargeable in 20 years.
 - (i) What is the monthly payment? [3 marks]
 - (ii) What is the buyer and seller's equity in the house after 12 years? [5 marks]

Total [25 marks]

END OF EXAMINATION PAPER