



**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 – 2<sup>nd</sup> SEMESTER FINAL EXAMINATION - JANUARY 2011  
REAL ESTATE INVESTMENT AND FINANCE[CFI 4205]**

**TIME ALLOWED: 3 HOURS**

**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** benefits of international real estate investment. [16 marks]  
(b) Evaluate the use of property 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) With reference to the 2007-2009 global financial crisis, evaluate the use of securitization in real estate markets. [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	\$725,000.00
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	\$720,000.00
Distance from city	10 miles		

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

<b>Characteristic</b>	<b>Units</b>	<b>Slope coefficient (\$ per unit)</b>
Number of rooms	Number	50 000
Number of bathrooms	Number	10 000
Distance from city	Miles	(3 000)

**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 income risk. [9 marks]
- (c) Explain why international real estate investment provides greater diversification benefits than international stocks and bonds. [5 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 PAPER**