# NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY FACULTY OF COMMERCE <br> DEPARTMENT OF FINANCE <br> BACHELOR OF COMMERCE HONOURS DEGREE IN FINANCE <br> PART IV - FINAL EXAMINATION - JUNE 2010 <br> REAL ESTATE INVESTMENT AND FINANCE [CFI 4205] <br> TIME ALLOWED: 3 HOURS 

## Instructions to Candidates

Answer Section A and three (3) questions from Section B

## SECTION A [40 marks]

## Question 1

What is the market value of each of the following properties given their annual net operating incomes and capitalization rates?

| Property | $\underline{\text { NOI }}$ | $\underline{\text { Capitalization Rate\% }}$ |
| :--- | ---: | :--- |
| A | $\$ 16,850$ | 10.0 |
| B | 3,100 | 8.5 |
| C | 4,800 | 11.25 |
| D | 13,300 | 12.2 |

## Question 2

Adam and Ankel are evaluating an investment in a condominium close to the campus of the University at Riverside. Adam has determined that the following numbers seem realistic.

Purchase price:
\$65,000
Sale price in one year:
Holding period:
Rents over period:
\$69,000
1 year
\$5,500

Ankel has found a savings and loan which will lend them \$50,000 at an interest rate of $13 \%$. Their alternative is to finance the entire $\$ 65,000$ out of their savings. ( taxes, maintenance and other expenses are assumed to be zero.)
(a) What is the holding period rate of return if (i) they use all equity, and (ii) they use the loan?
[4 marks]
(b) Redo a. above, assuming the property can be sold only for $\$ 65,000$.
[4 marks]
(c) Compare a. and b. in terms of leverage.
[2 marks]

## Question 3

What is the net present value of a property, which has the following after-tax cash flows:

Original required investment $=\$ 18,000$
Cash flows, years 1 to $5=2,000$ per year
Net sale proceeds at end of years (after all fees, etc.)= \$19,500
Discount rate $=12 \%$

## Question 4

Anita is an individual taxpayer who has gross income of $\$ 90,000$. Anita actively manages her investment in the condominium. Based on the following condominium investment income statement, reconstruct the income statement to after-tax cash flows. Assume a tax rate of $28 \%$. There was $\$ 2,000$ paid in principal over the year.

Gross rental income
Operating expenses

| Dues | $\$ 3,200$ |
| :--- | :---: |
| Maintenance | 600 |
| Interest | 21,000 |
| Depreciation | 16,000 |
| Promotion and advertising | 200 |
| Property taxes | 2,500 |
| Profit or (loss) | $(\$ 18,500)$ |

## Question 5

Suppose you are estimating the value of a shopping center by the income capitalization approach. You have determined that the gross rental income will be $\$ 225,000$ each year and that the operating expenses will equal $\$ 35,000$ each year. A similar center in the same area recently sold for $\$ 2,850,000$. You consulted the selling broker and learnt that the property was expected to have net income for the year of $\$ 175,000$ after operating expenses of \$27,500.

Explain the logic behind the net income capitalization technique and use the technique to calculate the estimated value of the subject property (show the calculations). [5 marks]

## Question 6

Langa says, "I just added a fireplace to the living room of my house in Killarney West, Bulawayo. I had the house appraised before I added the fireplace and the value was $\$ 225,000$. The fireplace cost me $\$ 75,000$, but I'm sure I'll get that money back with a good rate of return when I sell the house someday." What principle of appraisal has Langa ignored?
[5 marks]

## Question 7

a) What is the difference between investment value and market value?
[ $2^{1 ⁄ 2}$ marks]
b) Why is highest and best use analysis important in estimating market value?
[2½ marks]

## SECTION B [60 marks]

## Question 8

Briefly illustrate each of the following approaches to real estate market valuation and indicate in each case the type of property suitable for an approach :
a. Cost approach
[7 marks]
b. Comparative sales approach
c. Income approach

## Question 9

Briefly explain the basic structure and investment considerations associated with a real estate investment trust (REIT). What are the three basic types of REITs?
[14, 6marks]

## Question 10

Describe how real estate investment objectives are set and how the features of real estate are analyzed in determining real estate value.

## Question 11

Assume you have inherited a large sum of money and wish to use part of it to make a real estate investment. Would you invest in income property or speculative property? Why?
Describe the key characteristics of the income or speculative property on which you would focus your search.

## Question 12

Discuss is the differences between a real estate space market and the real estate asset market?
[20 marks]

